VOLUME 7, NUMBER 4 $4.00 JANUARY/FEBRUARY 1990
THE MAGAZINE FOR TEACHERS OF THE 1990s

TEACHING and computers

Com Completed 4/90

Tucson educators converge at the Special Education Computer Resource Training Center, Blenman School, Tucson, Ariz.

Our Third Annual Celebration of

TEACHERS' FAVORITE SOFTWARE!

Moon Fact and Moon Fiction

Computer Crusaders Meet Desktop Publishing

SCHOLASTIC

HE'S USING IT TO UNTRAP HIS SON.

DR. ELDO BERGMAN, CHILD NEUROLOGIST AND SON PHILIP.

Pretend that all the written words in the world: books, newspapers, warnings on medicine bottles, pretend all of it was a puzzle to you; incomprehensible; a source of embarrassment and *terror.*

To millions of people it is; children, adults, wrongly diagnosed as unintelligent or lazy or crazy; people who are none of these things but, like Dr. Bergman's son, dyslexic.

Three and a half years ago, Dr. Bergman decided to try something. Computers, he knew, could *talk*, and by talking might, just might, get his son, and others, out of a trap.

It worked. His son and others are able, suddenly, to "read" by listening; able to comprehend.

And no longer dependent on teachers who don't have time, tutors who cost money.

Philip can now learn as fast as he can think. Dyslexics, it turns out, are often extraordinarily fast thinkers. (Especially when given something to think about.)

Dr. Bergman is accomplishing this small miracle with the Amiga computer. The faster Philip races to catch up with himself, the farther the Amiga can take him: from listening to comprehending to reading to . . . who knows?

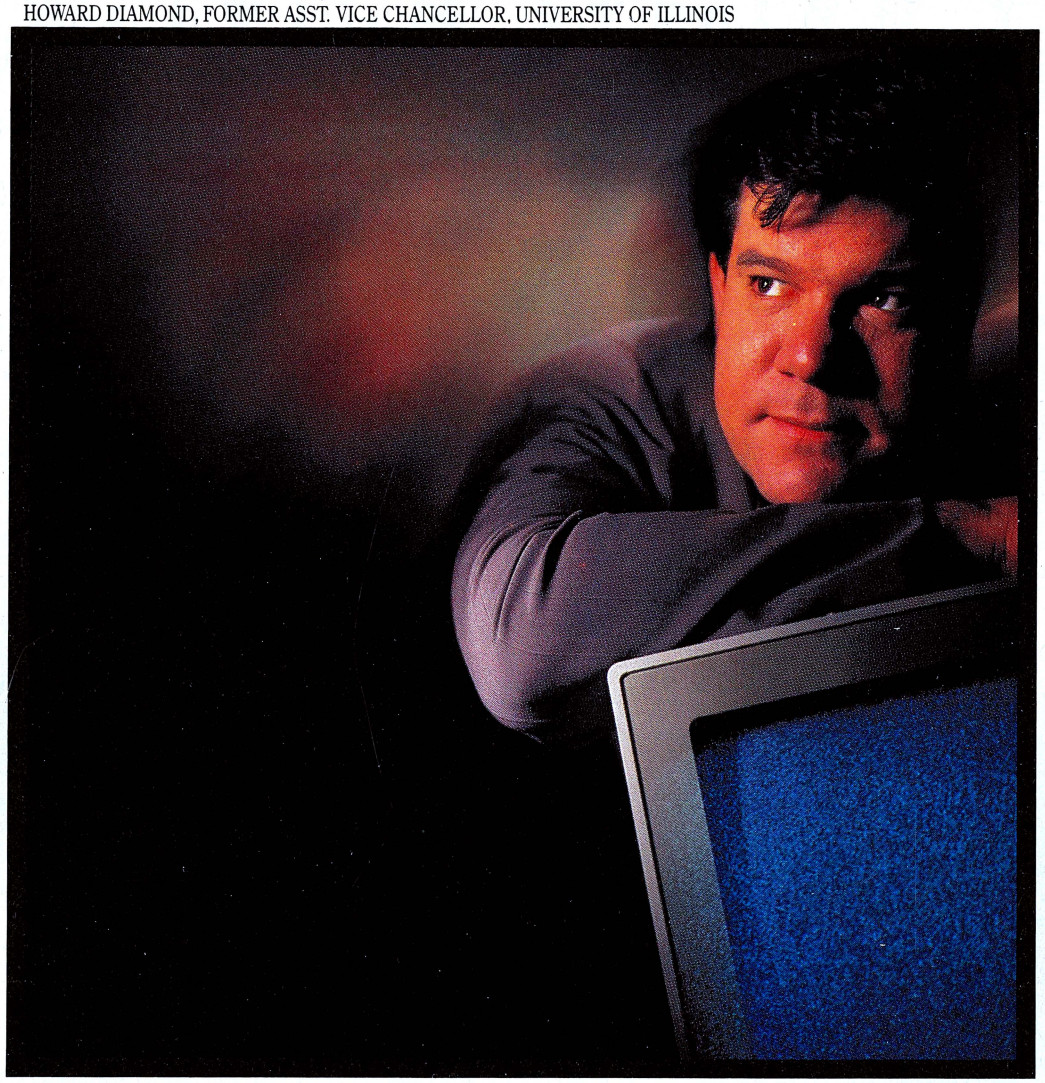
(And later, to create pictures, animate them, three-dimensionalize them, suffuse them with thousands of colors; to arrange, to play, to compose music. The Amiga can do all of this now, not 50 years from now.)

Is Dr. Bergman satisfied with the way things are going? Not entirely. Dyslexic students and their parents embrace what he's done. The schools, meanwhile, are "observing" the situation. Bergman is raising funds now himself for other school districts.

For information on how his program works, the software he's using, or just to offer him a little encouragement, write Dr. Eldo Bergman, at Intelligent Learning Systems, 5322 West Bellfort, Suite 116, Houston, Texas 77035.

"HOW COULD THERE BE THIS TECHNOLOGY I DIDN'T KNOW ABOUT?"

HOWARD DIAMOND, FORMER ASST. VICE CHANCELLOR, UNIVERSITY OF ILLINOIS



Hope you won't be as embarrassed as I was. I'd never even *seen* an Amiga computer, until very recently. How recently?

When the Vice President, who recruited me into Apple left to become President of Commodore who makes the Amiga; and, asked me to join him there as Director of Education.

I didn't turn him down; but I had to get up to speed on this thing called an Amiga.

When I was at the University of Illinois I was as enthusiastic an advocate of computers for education as anyone; later, at Apple, I continued to spread the "revolution."

But the revolution has been a disappointment. You know it, I know it.

Our expectations were high; so too were the costs.

The Amiga, to be blunt about it, is the computer I wish had been available to all of us ten years ago. But it wasn't.

However, today, it is widely embraced by video and graphics and animation and film and science professionals; and artists and writers and medical researchers (and Dr. Bergman, there on the left hand page).

But the Amiga is not widely known among educators.

Not yet.

We intend to do something about that at once.

(There is a videotape, done before I got here, which you owe it to yourself to see. It won't win any Cannes Film Festival awards, but it's genuinely informative and focuses on education and the surprising things the Amiga is doing for those who do know about it.)

Please send for it. It's an eye opener.

My first move is to make significant discounts on the Amiga available to those in education.

After all, we are the first computer company whose president and key people are from and for and of and committed to education.

You'll be hearing from us.

And from the Amiga.

AMIGA. THE COMPUTER FOR THE CREATIVE MIND.™

The Amiga allows you to fly. Faster than you thought you could. Without spending a lot of money. Without waiting around another 50 years. Amiga from Commodore. Why not give us a call at 800-627-9595.

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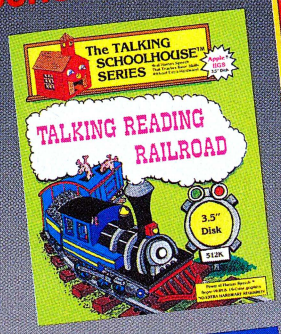
IT'S HERE NOW!

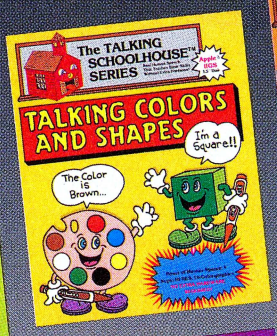
A New Generation of Talking Software that Captures the Full Power of the Apple® IIGS...

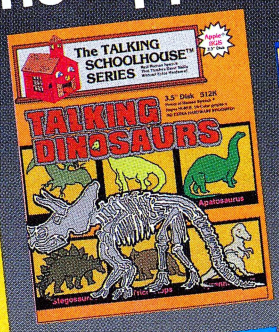
Imagine a "Talking Schoolhouse"

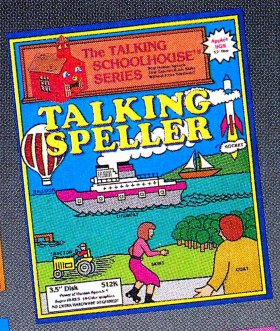
inside your GS computer — software that uses perfect human voice and the most stunning graphics imaginable to teach basic skills to youngsters. Why fantasize? . . It's here now and it's known as the TALKING SCHOOLHOUSE ™ SERIES from Orange Cherry Software. 14 software programs captivate children ages 3-9 as they explore basic concepts on their own:

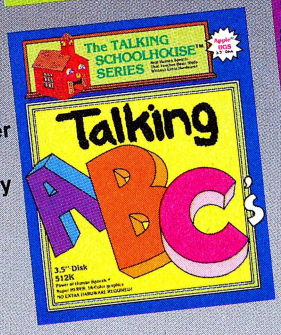
- Talking Animals
- Talking Dinosaurs
- Talking Numbers
- Talking First Writer
- Talking First Reader
- Talking School Bus
- Talking Alpha Chimp
- Talking Colors and Shapes
- Talking Reading Railroad
- Talking Addition and Subtraction
- Talking ABC's
- Talking Speller
- Talking Clock
- Talking Money

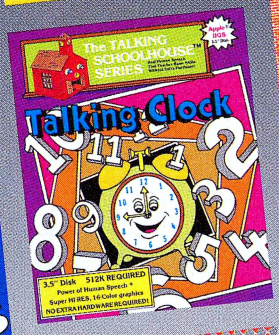


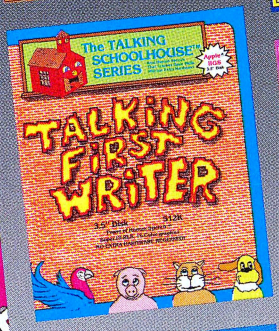


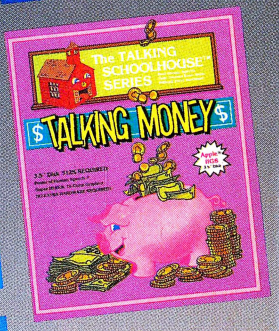


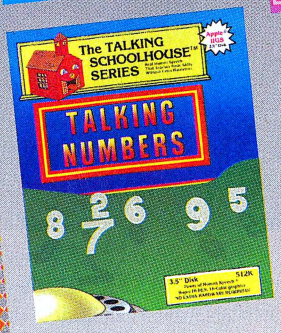


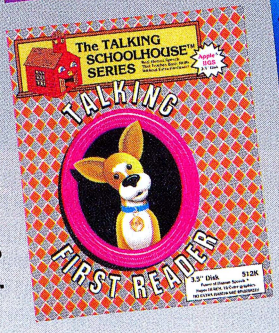




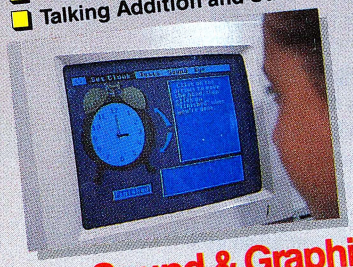






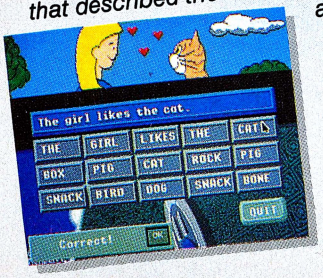


NO SPEECH BOARD OR ANY ADDITIONAL HARDWARE IS REQUIRED . . . ONLY THE STANDARD 512k APPLE IIGS COMPUTER.



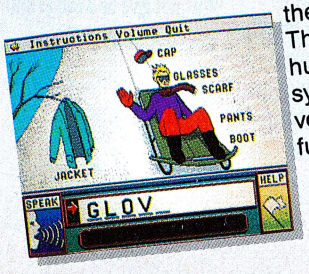
Super Sound & Graphics

See why children, teachers, and parents have been amazed & delighted by our super sound & graphics. One teacher writes: *"In Talking First Writer, we put in a sentence, the computer read it out loud, and then instantly produced a brilliant, colorful picture that described the sentence. We were astonished!"*



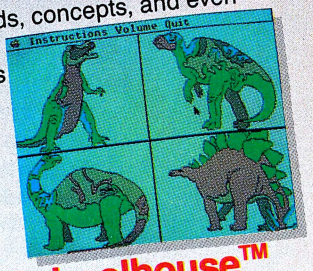
Perfect Human Voice

This software brings the friendly and reassuring voice of a real person into the computer learning environment. No speech board is required because we utilize the GS's built-in Ensoniq™ sound chip. Developers working with proven educational concepts have recorded actual human voice & electronically digitized the sound into the computer program. The result is perfect human speech - not a synthesized computer voice that only confuses youngsters.



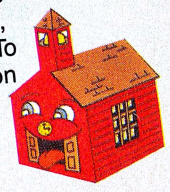
Super Hi-Res Graphics

Letters, numbers, words, concepts, and even dinosaurs come alive in thousands of colors with our super high resolution graphics. These programs let the GS computer perform at its maximum level.



The Talking Schoolhouse™ Series

from Orange Cherry Software. All programs are currently available on 3.5" disks for the Apple IIGS. The suggested retail price is $49, $59 for the School Edition. To order, or for more information contact your dealer or call toll-free (800) 672-6002.



TEACHING and computers

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Piñata *created by Edgardo Heydra*

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(CENTER)

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◆ WHERE IN TIME IS CARMEN SANDIEGO?

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FROM THE EDITOR

A Look Inside T&C

New Year's Resolutions For the New Decade

After months of predictions and preparation, the 1990s are finally really here. At *Teaching and Computers,* we believe that the new decade calls for a very special set of "New Year's resolutions," starting with these:

•We resolve to continue celebrating the remarkable ingenuity, stick-to-itiveness, and enthusiasm of computer-using teachers.

•We resolve to help veteran computer users find ever-new ways to integrate technology into their classrooms.

•We resolve to do all we can to help new technology users to "hit the ground running."

•We resolve to always keep in mind that computer-using teachers are teachers first and computer users second—and that technology is only a means to an educational end, not an end in itself.

•We resolve to support computer-using teachers in all of their roles: as organizers, researchers, mentors, innovators, and "squeaky wheels."

•We resolve to keep *T&C* firmly rooted in classroom reality—our lesson plans and projects should always be "do-able" by today's teachers using today's available technology.

•We resolve, at the same time, to keep one eye on the future, looking ahead for the new trends and tools teachers will want to make their own.

•We resolve to expand our role as an arena in which teachers communicate with each other—because you're the real experts, after all.

•We resolve never to lose our sense of fun—because fun is that extra ingredient that makes any lesson, software program, teaching technique, or magazine really worthwhile.

•We resolve to acknowlege the invaluable assistance given us by our teacher advisors, starting with the special New Year's salute below.

Happy 1990 to all!

M. Revenaugh

THANKS TO OUR 1989/90 TEACHER BOARD

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"Today, with many more Davidson software programs in the classroom, our mission remains the same—to produce the highest quality educational software. Davidson's creative approach to basic skills will fit directly with your curriculum objectives. And, you can 'custom-edit' our software to meet the individual needs of your students.

"We also provide the assurance of a 30-day preview, and a 5-year warranty with FREE disk replacement if anything goes wrong.

"I invite you to try our teacher-designed software."

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Math Blaster Mystery	**Math and Me**
Homeworker	**Reading and Me**

Standard easy-to-use interface gets students "up and running" quickly! Network versions are available for ICLAS/Novell, AppleTalk, SchoolMate, Omninet (Corvus), & Digicard.
Suggested retail: $299.95 each
Call today to receive a FREE Scope and Sequence Chart of Davidson programs.

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Teaching Tools From Teachers

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UPDATE

News for Computer-Using Teachers

EDITED BY LOUISE C. ORLANDO AND BILL MORGAN GOSEWISCH

HEADSTART EXPLORERS ESSAY CONTEST

"Which great American explorer would you have most liked to travel with?" Have your students answer this question and they may win an Explorer computer complete with color monitor and mouse as part of The Great American Explorer Essay Contest sponsored by HeadStart Technologies, manufacturers of the Explorer, and Scholastic Inc.

To enter the contest, students select an American explorer and explain why they would like to travel on an exploration expedition, and why they would choose this particular explorer to travel with. Entries must be received by January 31, 1990.

Twenty-five grand prize winners will receive Explorer computers. Teachers submitting the winning entries will also receive Explorer computers.

For a colorful two-sided wallchart and a teaching guide complete with contest rules and an entry form, contact: Bill Morgan, 8th floor, Scholastic Inc., 730 Broadway, New York, NY 10003; 212/505-3077.

(Circle 101 on Product Info. Card.)

COMPU-TEACH SPONSORS WRITING CONTEST

"Energy Builds a Better America" is this year's theme for Compu-Teach Software's creative writing contest for six- to 13-year olds.

One grand prize $5,000 college scholarship will be awarded, along with software and related materials for other prizewinners. Contestants must create a six- to 10-page essay booklet using Compu-Teach's *Once Upon a Time* or *Once Upon a Time II* software, in one of seven categories: electricity, oil, coal, natural gas, renewable energy sources, energy conservation, or nuclear energy. The contest deadline is February 28, 1990.

For a lively wallchart detailing contest specifics and/or a preview copy of either *Once Upon a Time* package, contact: Compu-Teach, 78 Olive Street, New Haven, CT 06511; 800/44-TEACH.

(Circle 102 on Product Info. Card.)

IRA BOOK: COMPUTERS IN LANGUAGE ARTS

The Special Interest Group for Microcomputers in Reading (MicroSIG) of the International Reading Association has recently published a book on training teachers to use computers for language arts instruction.

Preparation of Teachers for Microcomputer Instruction in Reading and Language Arts was written to support inservice as well as preservice training.

The book is $8 and can be ordered from MicroSIG, c/o Dr. Ernest Balajthy, Education Department, SUNY-Geneseo, Geneseo, NY 14454-1401.

(Circle 103 on Product Info. Card.)

TRAINING VIDEO FOR APPLEWORKS USERS

The National Appleworks Users Group (NAUG) has released a new training tape titled, *How to Use the Features of AppleWorks 3.0.*

The tape, priced at $9.95, covers more than 50 new features in the latest version of *AppleWorks.*

To order the 90-minute tape, write: National AppleWorks Users Group, Box 87453, Canton, MI 48187.

(Circle 104 on Product Info. Card.)

DUST COVER DOUBLES AS TYPING TUTOR

As a computer teacher in a Knoxville, Tenn. middle school, Holly Towne was looking for ways to keep her students from peeking at the keyboard when learning to touch-type. First she tried putting a light cloth over her students hands, but it fell off. Then she invented the TypeTop.

TypeTop sits above an Apple IIe keyboard, allowing students' hands to move underneath and out of sight. A full-size picture of the IIe keyboard is also available to place on the TypeTop as a reference. When computers are not in use, TypeTop doubles as a dust-cover.

TypeTops are $12.95 each and are also available in lab packs of 10 or more for $9.95 each. To order, write to Holly Towne, 1131 Circle Dr. S. E., Pigeon Forge, TN 37863.

(Circle 105 on Product Info. Card.)

UPCOMING CONFERENCES

January 30-February 2: Florida Education Technology Conference. Daytona Beach, FL. Contact: Janet Wil-liams, Charlotte County School Board, 813/639-2121, ext. 274.

February 1-3: 1990 National Conference "Computers and Reading/Learning Difficulities." San Francisco, Calif. Contact: Diane Frost or Gerald Block, Coordinators, Educational Computer Conferences, 1070 Crows Nest Way, Richmond, CA 94803; 415/222-1249.

February 22-23: Ninth Annual Indiana Computer Educators (ICE) Conference. Adam's Mark Hotel, Indianapolis, Ind. Contact: Kim Brown or Mike Russ, ICE '90 Conference, 1 S.E. Ninth St., Evansville, IN 47708; 812/426-5027.

March 1-3: The 19th Annual Northwest Council for Computer Education (NCCE) Conference. Eugene, Ore. Contact: Jack Turner, NCCE Conference, ED Center, 200 N. Monroe, Eugene, OR 97401.

March 14: Ninth Annual New Hampshire Association for Computer Education Statewide (NHACES) Conference. Concord, NH. Contact: Clint Cogswell, Dewey School, Liberty St., Concord, NH 03301; 603/225-0840.

March 20-22: Seventh International Conference on Technology and Education. Brussels, Belgium. Contact: Jamie Alexander, Radio Shack Education Division, 1600 One Tandy Center, Fort Worth, TX 76102; 817/390-3053 or FAX 817/390-2774.

March 29-31: 1990 National Conference "Computers and Reading/Learning Difficulities." The Ramada Renaissance-Techworld, Washington, DC. Contact: Diane Frost or Gerald Block, Coordinators, Educational Computer Conferences, 1070 Crows Nest Way, Richmond, CA 94803; 415/222-1249.

May 1-3: National Online Meeting and Integrated Online Library Systems (IOLS). Sheraton Centre Hotel, New York, NY. Contact: National Online Meeting, Learned Information, Inc., 143 Old Marlton Pike, Medford, NJ 08055; 609/654-6266 or FAX 609/654-4309.

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INSERVICE WORKSHOP

A Guide for Teachers Helping Teachers

BY CAROLYN FETNER AND KAY JOHNSON

Presto! Printing & Publishing

Nothing grabs the attention of a prospective computer user like the prospect of producing professional looking banners, signs, invitations, worksheets, door decorations, calendars, certificates, newsletters, and so on. At Gung Ho Elementary, both adult and student learners have found working with printing and publishing programs to be "addictive," captivating even those who have resisted learning to use the computer.

At Gung Ho, the inservice experts start teachers out with easy-to-use "printing" programs that create signs, banners, and greeting cards—heavy on the graphics, light on the text—before moving on to desktop publishing (heavier on text, lighter on graphics). As they master these programs, teachers quickly find ways to get their students into the act as well.

POPULAR PRINTING PROGRAMS

Some of Gung Ho's favorite printing programs include:

Print Shop (Broderbund): This "granddaddy" of graphics/printing programs has now been supplemented by various "Companion" graphics libraries—for schools, for holidays, and more. Works with Apple II, MS-DOS, Macinstosh, even Atari computers.

SuperPrint II (Scholastic): A multiuse program, this has more graphics of varying sizes than *Print Shop,* permits production of posters, signs, cards, banners, borders, calendars, door decorations, and wall murals. It is reasonably priced, works with Apple II and MS-DOS computers, and is available in a lab pack.

PrintMaster Plus (Unison World): Brings flier-, banner-, and letterhead-making capability to MS-DOS compatible (as well as Apple II) computers. Also compatible with various specialized clip art collections.

Certificate Maker (Springboard): Perfect for producing the many types of certificates required to reward and motivate elementary children! Works with Apple, MS-DOS, Atari, Commodore, and Macintosh computers.

Print Magic (Epyx). Another alternative for creating banners, signs, posters, stationery, and certificates, using Apple II or MS-DOS computers; offers great flexibility in terms of placement and sizing of graphics.

LEARNING BY DOING

How can you convert the teachers at your school to computer publishing? Try Gung Ho's combination of modeling and hands-on practice.

First, pique teachers' interest by sending out computer-generated invitations to teachers to gather for a graphics workshop. Encourage them to think of the kinds of things they might want printed.

As an opener for your workshop, have the teachers watch as you "talk through" producing a simple flier or bulletin board banner on your computer. Use an LCD (liquid crystal display) unit on an overhead, if you have one. If not, gather your colleagues around the monitor.

Next, distribute the handout on page 9, and give teachers a few minutes to sketch out their ideas. Choose one teacher to come to the computer and create her design with your help. Then pair teachers up to work with the graphics program on their own. Be sure you allow plenty of time for experimentation and draft printouts.

After the workshop, you might want to set aside an after-school hour or two each week for teachers to consult with you—and each other—on new publishing projects.

Once teachers get the hang of graphic/printing programs, you might move on to desktop publishing, using such programs as *Publish It!* (Timeworks), *The Newsroom* (Springboard), or *NewsMaster* (Unison World) to produce parent newsletters, reports, and more. You can even adapt Handout #4 to guide them in planning contents, headlines, and designs.

ON THE BANDWAGON!

Once teachers and students at your school have become computer publishers, there's no turning back. True, these computer-generated materials should never diminish the value of originally drawn and hand-lettered works of art, but they can certainly be useful in a wide variety of ways. The best part is that when even one teacher at a school makes use of some of these programs, the pyramid effect will quickly be evident. Not every teacher will jump on the graphics bandwagon, but little by little the wagon will fill. And, in keeping with the broader goal of education, students will be the ones to benefit . . . from creative instruction, additional instructional time, and the opportunity for greater personal expression. ❦

Carolyn Fetner and **Kay Johnson** are media specialists at Dyer Elementary and Centerville Elementary, respectively, in Gwinett County , Ga.

JIM LAMBRENOS

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INSERVICE WORK

Presto! Printin

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PrintMaster Plus (Unison World): Brings flier-, banner-, and letterhead-making capability to MS-DOS compatible (as well as Apple II) computers. Also compatible wit
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DESIGN A SIGN

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I want to create a ***(check one)*****:**

___Classroom poster ___Banner ___Worksheet ___Parent Flier ___Greeting Card ___Letterhead

The text should read ***(be concise!)*****:**

The graphics should be ***(list general examples)*****:**

Make a rough sketch of your design here:

Now, follow the sketch to create your design on the computer, using a graphics/printing program.

✔ HELPFUL HINTS ✔

•Play around with lots of fonts (typefaces), type sizes, and graphics until you find the combination you like best, but—
•Keep your finished design simple. Combining too many different fonts, sizes, and graphics makes your message difficult to decipher!
•Always save your designs on disk, so that you can adapt them easily for future use.

CLASSROOM HAPPENINGS

What's Happening in Computer Classrooms

BY LOUISE C. ORLANDO AND
PAMELA KEENAN FOSTER

Mother Goose meets LogoWriter *in Piedmont, Calif.*

THIRD GRADE POETS ROLL OUT REBUS RHYMES FOR KINDERGARTENERS

Mother Goose moves aside as third graders in Piedmont, Calif. bind their own creative *LogoWriter* (LCSI) rebus poems into a collection titled *Mother Turtle's Silly Poems* for the kindergarteners at their school. "Mother Goose is on Vacation," proclaims the book's title page, and while she's away, the younger students at Corpus Christi School are invited to peruse these "Silly Poems Programmed by the Third Grade for the Kindergarten," either in printed form or on disk.

The collection contains the third graders' original and humorously adapted rebus rhymes illustrated with Logo graphics. The disk version comes complete with background music.

"The kindergarteners loved seeing the poem files on the computer," says Dotty Gonsalves, a third-grade teacher at Corpus Christi. "The rhymes, graphics, and music made them laugh." The third graders' knowledge of computers also nurtured the younger students' excitement about the prospect of learning *LogoWriter* themselves when they graduate to first grade.

As for the third graders, says Gonsalves, their computer confidence soared, encouraging continued use of the computer as a thinking and productivity tool. "I also hope that producing a book for the younger children made them feel the joy of giving," Gonsalves concludes.

PUTTING CALCULATORS TO THE TEST

Math students at the Louis Armstrong Middle School in Flushing, N.Y., are watching numbers add up—on calculators! Students at this school are part of a nationwide research project co-sponsored by Texas Instruments and Addison-Wesley Publishing Co.

The project is designed to meet the new technology standard set by the National Council of Teachers of Mathematics, which calls for the use of tools such as calculators and computers in the classroom.

As part of the research project, Dr. Fran Curcio, Armstrong's math specialist and assistant professor of education at Queens College, has been able to supply the school with Math Explorer calculators from Texas Instruments and lesson plans from Addison-Wesley.

Armstrong sixth- and seventh-grade math teachers are enthusiastic about using calculators as a means to involve all children in math. Without calculators, says Curcio, students must spend hours doing basic math drills—and then only the students that master these drills can advance to more complex mathematical concepts.

"Our students spend more time exploring, conjecturing, playing 'what ifs,'" says Curcio. "They're playing true-to-life games, using technology in a way they'll use it for years to come."

ILLINOIS PARENTS EXPLORE "KIDWARE"

For an hour every Monday morning, parents of kindergarten through third-grade students squeeze into undersized desks at South School in Glencoe, Ill. The parents are learning about educational software—specifically, the software that their children use everyday.

South School's "adult education" program was developed in response to parents' requests for information about how their children are using computers at school, and what home computer and software combinations would complement their schoolwork.

South School staff placed advertisements and schedules for the three hands-on parent computer courses in the school's newsletter. One class, "Introduction to the Computer, or The Computer Will Not Byte," familiarizes the novice with standard computer procedures and provides introductory instruction in *LogoWriter* and other software programs currently used by the students. The two other classes, "Focus on the Second-Grade Computer Program" and "Focus on the Third-Grade Computer Program," discuss how *LogoWriter* is used in the classroom and why, and provide hands-on activities with a range of educational software used in the different grade levels.

South School plans to continue its parent-education programs. "Feedback from parents following each of these sessions was positive," says computer coordinator Marianne Handler, who adds that the district hopes to begin more sessions and lengthen the time available for each class. ❦

BE A REPORTER!

What exciting technology project has *your* class or school been working on lately? We'd like to tell our readers about it in a future edition of "Classroom Happenings"—and pay you $15 to $30 for tipping us off! Send a brief write-up of your project (with photos, if you have them) to: Louise C. Orlando, *Teaching and Computers*, Scholastic Inc., 730 Broadway, New York, NY 10003.

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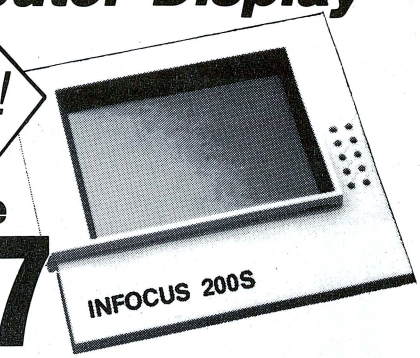

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REQUIRED PC VIEWER ACCESSORIES:

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A20	Internal card for Macintosh SE. Does not use SE expansion buss. Both monitor and PC Viewer can be viewed	$119.95	**$107**
A35	Connects to a Mac II video board (supplied by Apple). Allows both monitor and PC Viewer to be viewed	$249.95	**$217**
A50	Allows AT&T 6300, 6300+ or Olivetti M24 or M28 to be used with PC Viewer. Connects AT&T/Olivetti 25 pin connector to 9 pin PC Viewer connector	$119.95	**$107**

OPTIONAL PC VIEWER ACCESSORIES:

		Retail	LS
A60	Adapter box allows both monitor and PC Viewer to be viewed. For IBMs with EGA or CGA only. Equipped with a 9 pin input and two 9 pin outputs	$149.95	**$129**
A40	Adapter cable for use with IBM PS/2 with a VGA card. Allows both monitor and PC Viewer to be viewed	$199.95	**$179**
B80	Battery pack powers PC Viewer for up to 4 hours. Warning: for use only on the 200 / 480 series or 7.5-9 volt 6420/6448	$119.95	**$107**
C70	Deluxe Cordura carrying case for your PC Viewer (all models), power supply and cables. Hand and shoulder straps for easier carrying	$69.95	**$49**

Note: To connect the monitor with IBM with CAG or EGA, use A60; on IBM PS/2 use A40.

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BY THERESE MAGEAU

Linking Software to Texts

One of the great challenges of educational computing is avoiding the "dust collector syndrome": shelves of brand new software, unopened and unused. Too often, when teachers don't use software it's because they don't see how it fits into their curriculum, a curriculum still driven by the printed word.

So what happens when teachers find out that a particular piece of software addresses the same skills taught in chapter three of the math text they're using? According to Woodbury Elementary School computer coordinator Adrianne Geszler, they come running for the software!

CASE STUDY IN SHAKER HEIGHTS

For years, when Adrianne wanted to disseminate software information to the teachers in her Shaker Heights (Ohio) fifth and sixth grade school, she had to keep her ear to the ground. "I'd hear that a teacher was working on such-and-such a skill in her class and I'd say, 'Hey, we've got a piece of software that will help you.' But there are 30 classroom teachers in this building. I couldn't possibly know what each of them was doing every day."

So two years ago she and Barbe Kilroy, the school's library media specialist, got together to create a list that coordinated the school district's curriculum objectives with the texts teachers were using and the software in her school's computer library. Adrianne put the list on a data base, printed it, put it in a binder, gave every teacher a copy, and then held an inservice on how to use the binder. She reports that her colleagues' response was overwhelmingly positive. "Teachers actually applauded when we gave them each a copy," she says. They also started bringing the guide to department meetings. "I'd watch them leaf through it as we'd discuss how to meet curriculum objectives. They even took the binder home to do lesson plans."

READY-MADE LINKAGES

Of course, there are textbook and software publishers out there who have already done what Adrianne and her fellow teachers did for themselves. For instance, Silver Burdett & Ginn has a chart in the front of each of its software teacher's guides listing the skills the software addresses and the coordinating Silver Burdett texts. MECC's Management Master (MMM) correlates MECC software with the objectives of textbooks from most of the major publishers. Apple Computer also publishes a curriculum guide that lists software titles by curriculum skills objective. The hitch, of course, is that to make good use of these and other companies' correlations, you also have to be using their products.

HOW TO DO IT YOURSELF

If your school has an eclectic text and software library that fits into no particular publisher's plan, you can do what Woodbury School did, if you have the following ingredients: a data base program; a list of your district's curriculum objectives by subject area; at least one person familiar with the school's software collection; and at least one person familiar with the school's textbooks in each subject area.

The first step is to bring together teachers representing all grade levels and subject areas, and divide up the work. On the text side, for example, one person would create a math textbook list for grades K-2, another for 3-4, and so on—allowing each person enough time to generate a thorough list of curriculum objectives and textbook topics, chapter by chapter.

Active computer-using teachers can be the designated software correlators. Again, strive for a broad representation of grade levels and subject areas. Take time to re-acquaint yourselves with the software in your school's library and classrooms, and survey teachers whom you know are using certain programs to find out what skills they address.

BRING IT ALL TOGETHER

After committee members have collected their information, it's time to put together the data base. Be sure to choose a simple data base program, even one that's designed specifically for children (like *Bank Street Beginner's Filer* by Sunburst or Houghton Mifflin's *Friendly Filer)*—you'll want all committee members to input their own data (so that one person doesn't have to do it all), and the simpler the program and the format, the more willingly everyone will participate. It's also a good idea to designate a "trouble shooter," someone who knows the ins and outs of the program.

SAMPLE DATA RECORD

SUBJECT	Mathematics
SKILLS OR OBJECTIVES	addition and subtraction of decimals
GRADE LEVEL	5
TEXT	Houghton Mifflin Mathematics 5
CHAPTER OR SECTION	6-5 Comparing and ordering decimals
SOFTWARE	Get to the Point (Sunburst)
PROGRAM OPTION OR SECTION	Point of Order, Counterpoint

Created with* Microsoft Works, *this data record links a Sunburst math program with the correlating fifth-grade math textbook chapter and section.

Each record will need the following fields of information (see example on previous page): Subject, Skills or Objectives, Grade Level, Text Title, Chapter, Software Title, Program Option or Section (for those multi-purpose software packages which may apply to the objective only in part.)

The data input procedure can be easily divided into two steps. In the first step, textbook committee members enter textbook titles and curriculum objectives. In the second step, the software committee members take each software title and the objectives it addresses and then do a search for texts with the same objectives. For instance, if your program is Tom Snyder's *Decisions Decisions: On the Campaign Trail,* you would perform a search for those texts which cover "the electoral process." When the record containing *Magruder's Government* appears, you simply enter in the title of the program. The correlation is done!

If you can't find enough teachers for this level of joint effort, you have other options. You might begin by having computer-using teachers enter the objectives, grade levels, and software information into the data base. They can then print out the records and give them to the appropriate teachers to fill in the textbook titles and chapters by hand. Later, a few computer-users can work together to enter the textbook information into the data base for a final printout.

A NEW LEVEL OF INTEGRATION

Once the project is finished, your committee might want to give a school inservice that not only instructs teachers on how to use the list in a binder, but how to use the data base as well, and at the end of the workshop give each teacher a binder *and* a data disk. After all, once they've mastered the data base program, teachers will realize that a search and sort procedure on computer is far easier than leafing through an entire binder of paper. This way teachers will have the opportunity to integrate computers not only into their teaching, but into their curriculum management too. And the more teachers see how computers can help them, the more they'll see the benefits for their students, and the fewer dust collectors there'll be in your school!

Therese Mageau is an associate editor of *Teaching and Computers.*

LogoWriter® Activity #1 #2 #3 #4 #5 #6

There's No End to What You Can Do with LogoWriter

Why? Because no other educational package offers so many fully-integrated features – turtle graphics and animation, word processing, Logo programming, music, plus comprehensive learning materials. Here's just one idea!

NEWSBREAK

Create a LogoWriter "video" news presentation. Divide the class into groups. Each group produces a news segment that includes animation and text. Select one group to be the producers. They must decide on the order in which the events are presented and write a procedure that links all the LogoWriter "pages." For example:

```
to news
getpage "protest
wait 40
getpage "USSR
wait 40
getpage "parade
...(include all the events)
end
```

Now show the news! Type: news

Discussion: How does the news on television differ from news in the newspaper?

NEW! *LogoWriter Secondary* for junior and senior high schools!
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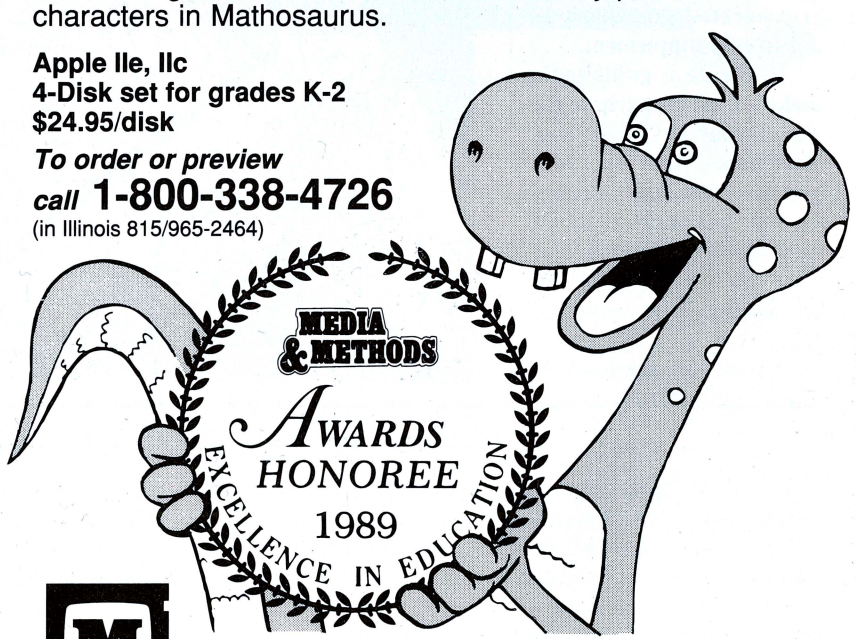


MICROGRAMS PUBLISHING
1404 N. MAIN ST., ROCKFORD, IL 61103

Circle 27 on Product Info Card.

MICRO IDEAS

EDITED BY LOUISE C. ORLANDO AND BILL MORGAN GOSEWISCH

Quick Computer Tips and Activities

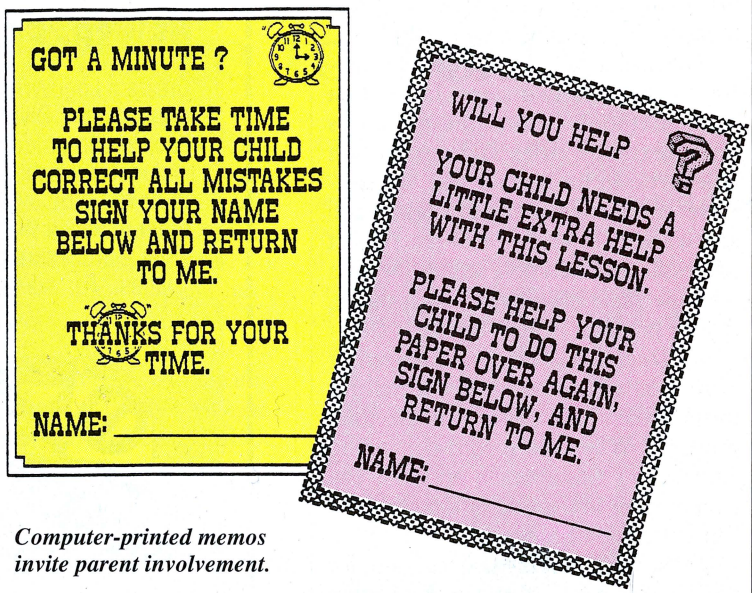
A GRAPHIC REQUEST FOR HOMEWORK HELP

Do some of your students have problems with homework? Lend them a hand by asking parents to assist with homework questions. I created a computer-generated memo that encourages parents to do just that.

Using a graphics program, I designed a catchy-looking memo that asks parents to spend some time helping their child with his or her homework. I even left space on the bottom for parents to sign their names. I staple a copy of this memo to each assignment that is taken home.

The memos have received positive and encouraging responses from the parents. And my students? They really appreciate the opportunity to improve their grades.

Marilyn B. Clay
Delta, Ohio

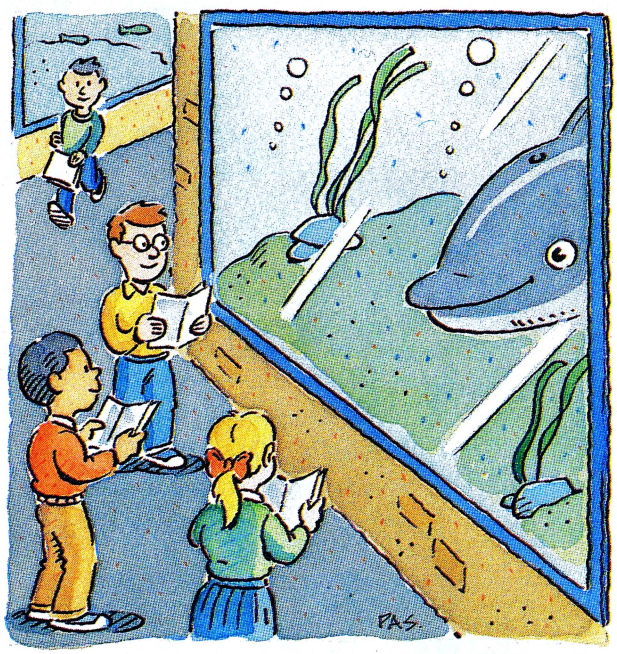


Computer-printed memos invite parent involvement.

GUIDEBOOK ENRICHES FIELD TRIP FUN

The last time you took your students on a field trip, did they rush past exhibits, skip over important information, and finish a half hour tour in three minutes? One way to slow them down and help them learn is to create a computer-generated guidebook as a field-trip supplement.

To create a guidebook, make an advance trip to the site of your next field trip. Take notes, write questions and answers, make sketches, list important places, and record anything else that will be helpful in enhancing your students' trip.



When you get back to your computer, translate your material into word processing and graphics files. Fold several sheets of 8.5- x 11-inch paper in half to form a 5.5- x 8.5-inch booklet. Print out your text and graphics, and cut them out to fit into your booklet (use the reduction function of a photocopy machine to "shrink" them, if necessary). Next, glue everything into place. Finally, make copies of your booklet for the class. If you have a large class, label several spots as starting points so that students can work in smaller groups.

D. Richard Turnbull
Browns Point School
Tacoma, Wash.

MAKE THE MOST OF OFF-LINE TIME

If your students get restless waiting for their turn at the computer, try these computer-related "boredom busters."

•Give students a list of computer terms to define.

•Open a computer, and have students identify the inner workings of the machine.

•Have students practice putting a write-protect tab on a disk.

•Let students handle damaged disks so they become familiar with the untouchable parts of a disk.

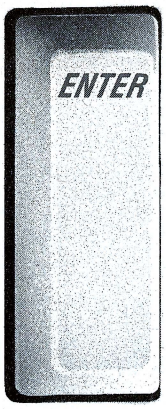
•Pass around a scrapbook of computer-related articles.

•Have students create a poster depicting common disk accidents, such as spillage, heat, and so on.

I find these activities really speed up waiting time for my students while increasing their computer sensitivity.

Rose Mary Valeriote
St. Boniface School
Anaheim, Calif.

(continued on page 16)



CONTEST DEADLINE JANUARY 31, 1990

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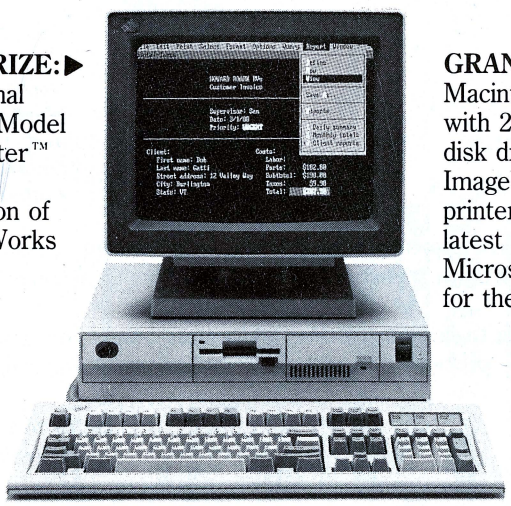
Two Fabulous Grand Prizes

GRAND PRIZE: ▶ IBM Personal System/2® Model 30, Proprinter™ II, and the latest version of Microsoft Works for the PC.



GRAND PRIZE: ▶ Macintosh SE with 20 meg hard disk drive, an ImageWriter® printer, and the latest version of Microsoft Works for the Macintosh.

ADDITIONAL PRIZES: 10 Class-in-a-Box courseware kits, and 50 Microsoft Works T-shirts.

PLUS: In addition to the prizes, winning entries will be published in a special editorial supplement to the May/June 1990 issues of *Electronic Learning* and *Teaching and Computers.* Winners will also be featured in Scholastic's *Instructor*.

HOW TO ENTER **1.** The Microsoft Works Lesson Plan Writing Contest is open to all public, private, or parochial school teachers in grades K-12. **2.** Each lesson plan entry must include a separate cover sheet with the name and address of the person submitting the entry, the subject area of the lesson plan, the grade level it's designed for, curriculum objective(s), materials needed, Microsoft Works application(s) used in the lesson plan, and the platform (IBM or Macintosh) it's written for. **3.** All lesson plan entries must incorporate the use of one or more Microsoft Works application programs. **4.** The maximum length of each lesson plan is 3,000 words, plus any data files, templates, and/or student worksheets. **5.** Entries will be judged by a panel of three judges including a curriculum specialist, computer coordinator, and Scholastic editor. Decision of the judges is final. **6.** Entries will be judged for their creativity of concept; relevance of subject area and objectives; potential effectiveness in meeting objectives; appropriate and innovative use of Works module(s); and overall clarity of presentation. **7.** All entries become the property of Microsoft Corporation, which reserves the right to edit and use the entries for promotion purposes without compensation or notification. **8.** All entries must be postmarked no later than January 31, 1990. **9.** Family members or employees of Microsoft Corporation or Scholastic Inc. are not eligible to participate. The contest is VOID WHERE PROHIBITED BY LAW.

entries to: Microsoft Contest, % Bill Morgan, Electronic Learning, 730 Broadway, New York, NY 10003

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IMAGINARY BIRTHDAY FILES FOR FAMOUS PEOPLE

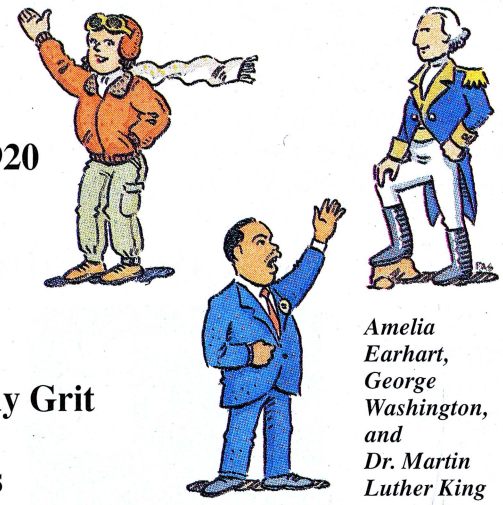
What began as a routine computer exercise at my school became a more creative activity when one child shouted, "Let's make up our own information!"

It all started with a data base exercise that revolved around birthdays. The class brainstormed and came up with this list of information they'd want each record to include: name, street, city, state, zip, phone, birthdate, favorite color, hobbies, and last gift received. Suddenly, every student wanted to make up imaginary data on famous people from history and mass media.

Here is one example of a "famous fictional file."

Phil Scheuer

NAME: King Tut
BIRTHDATE: August 9, 1920
STREET: Sahara Drive
CITY: Cairo
STATE: Egypt
ZIP: 70000
PHONE: 555-5555
FAVORITE COLOR: Sandy Grit
HOBBIES: Mummifying
LAST GIFT: Ace Bandages



Amelia Earhart, George Washington, and Dr. Martin Luther King

To mark upcoming historical celebrations, you might have your students create special files for African-American History Month (February), Presidents' Day (February 19), and Women's History Month (March).

In addition to being fun, creating these fictional files on famous people encourages students' understanding of data entry procedures and builds confidence through hands-on experience at the keyboard.

Dr. Leticia Ekhaml
Carrollton, Ga.

ATTENTION!

Teachers! We need your help! How do you use the computer to capture your students' attention? What creative and innovative teaching methods have you discovered? We'd like to hear about them and pass them on to our readers in a future edition of "Micro Ideas."

Please send your ideas to Louise C. Orlando, *Teaching and Computers*, 730 Broadway, New York, NY 10003. We pay $15 to $30 for each Micro Idea we use. Don't forget to include your name, address, phone number, and school on each page you send us.

SAY IT WITH HEARTS ON THIS VALENTINE BULLETIN BOARD

Let your students open their hearts with this wacky graphic Valentine idea. Using your favorite graphics program, have kids create silly Valentines for all of the people, places, things, and activities that they love—from Mom and Dad to skateboarding. Each Valentine may be a funny message accompanied by a graphic or just a graphic that "says it all."

Once all the Valentines are complete, have your students work together to create a bulletin board to display their Valentines. Students may want to do anything from hand-drawing a giant heart on butcher paper to creating a computer-generated banner as a backdrop for their Valentines. Have students add color to the Valentines and bulletin board with construction paper, glitter, and colored pencils or crayons.

Louise C. Orlando
New York , N.Y.

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OE39310	Story Writing Task Cards		19.95	
OE39046	Computer Ideabook		17.95	
OE42647	Computer Ideabook II (NEW!)		17.95	
OE39047	Holiday Computer Activities		17.95	
			Total	

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School _____

Address _____

City/State/Zip _____

Signature _____

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IMAGINARY BIRTHDAY FILES FOR FAMOUS PEOPLE

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Phil Scheuer

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Louise C. Orlando
New York , N.Y.

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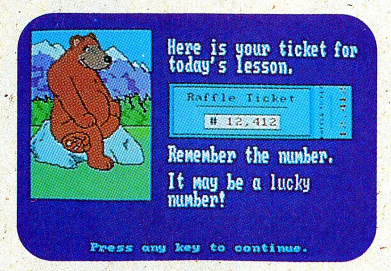
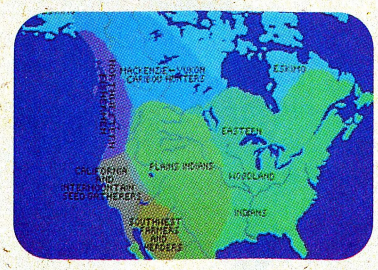
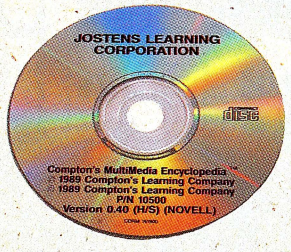




At the same time, students can reap the rewards of self-directed learning and problem solving with our Discovery Learning System. They'll discover an exciting, interdisciplinary learning environment that includes Compton's Multimedia Encyclopedia™ plus versatile on-line reading and writing tools. And computer-simulated laboratories in science challenge kids to solve intriguing problems and apply the scientific process. Teachers can set the direction for learning, or let students chart their own course of discovery.



The self-paced lessons of our At-Risk Learning System help hard-to-reach students experience success while they master reading, writing, mathematics and life skills that work in their world.

And we help get parents involved in learning with the Take-Home Computer Program. It combines the power of technology with parental activities to help kids grow in success and confidence.

Restructuring education is a big challenge. Today, Jostens Learning helps you meet that challenge by delivering powerful instructional solutions with the flexibility to work in any environment, with every student, at the heart of education.

To find out more, call or write Jostens Learning, 6170 Cornerstone Court East, San Diego, CA 92121, (800) 521-8538.

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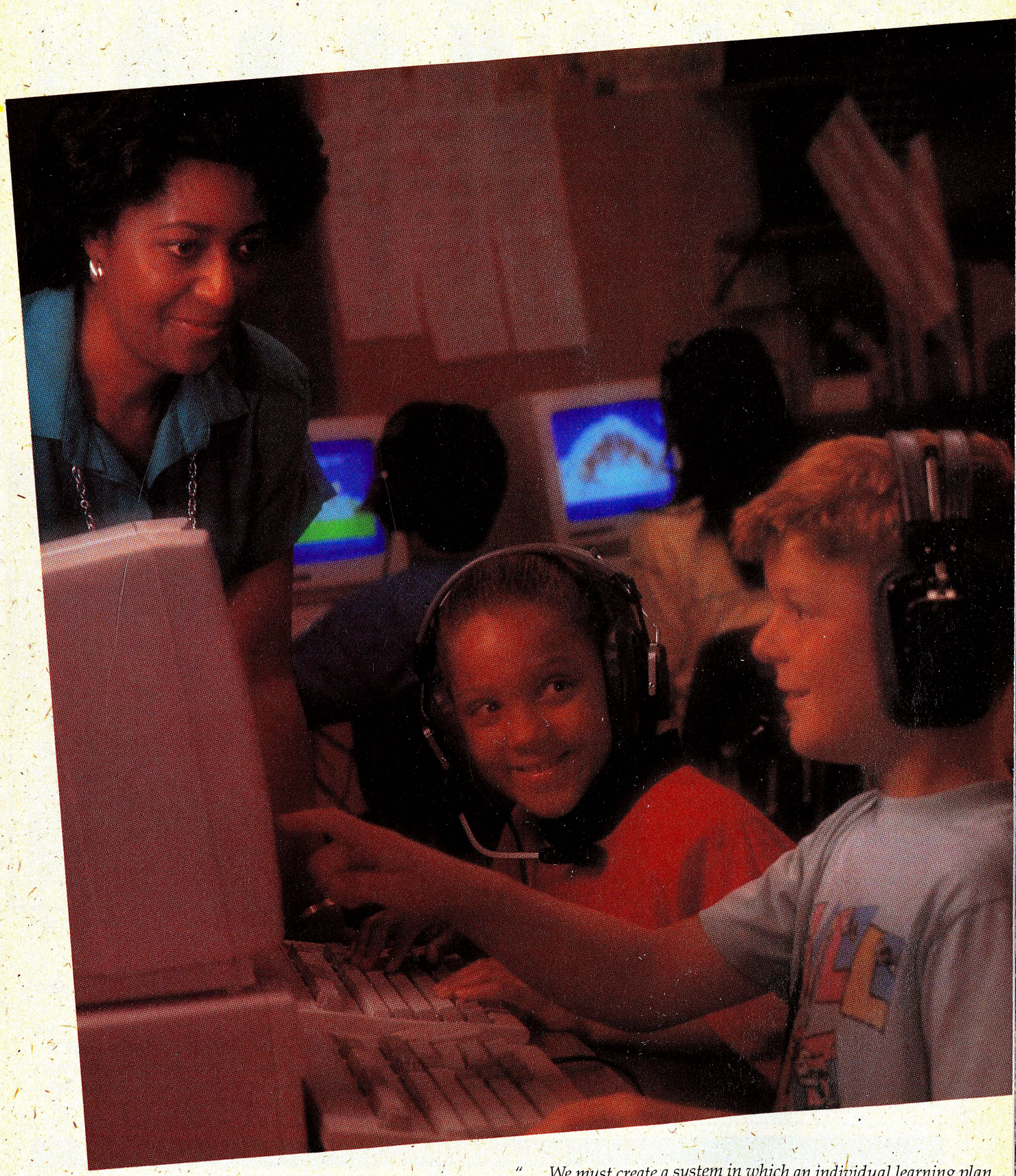

". . . We must create a system in which an individual learning plan permits each learner to proceed at a rate and pace that is challenging and achievable, makes no unfair comparisons with the progress of others . . . and assures positive reinforcement."

Transforming American Education: Reducing the Risk to the Nation

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OUR THIRD ANNUAL TEACHERS'

From Great Falls, Mont., to Mechanic Falls, Maine, . . . from Las Vegas, Nev., to Suburban, Md., . . . from Sidney, Iowa, to Hugh, Fla., . . . our readers responded from every corner of the country to tell us about their favorite software.

And what did they tell us? That programs teachers speak of as "classics" or "old standbys" are called that for a reason: you couldn't think of teaching without them. Teachers, our survey seems to indicate, are remarkably loyal to what they know works (see "All-Time Favorites," at right). There are some new titles among the familiar, but not as many as we hoped—which may also be a result of the fact that not many new programs were released last year.

Over 100 teachers filled out a five page survey that spanned grades K-8, language arts, mathematics, science, social studies, and "tool" software. The programs you'll read about on the following pages made the list if they were one of four mentioned most often in a category. In the case of a tie, we chose those programs that did not appear on the charts in the last two years—if there's something new our respondents have discovered, we want you to know about it.

Tucson teachers talk about their favorite software packages: (left to right) Norma Zuniga, Ron Chapman, and Glory Tacheenie-Campoy.

In those cases where a program is no longer being sold in its original version, we listed the upgraded version. And there are a few cases where a software publisher didn't stand by one of the "old standbys" and discontinued it. But we listed those titles anyway—you may find them in your library or computer resource center.

We know this list isn't going to name everyone's favorite, but we think it's bound to include a few of your own "can't do withouts"—and maybe give you a surprise or two in the process!

BY THERESE MAGEAU

ON THE COVER: Special educators in Tucson, Ariz., gather at Blenman Elementary School for a southwestern-style celebration of educational software. In foreground (at *piñata*), Rosario Howard, Davis Bilingual Learning Center. In background (left to right), Ron Chapman, Townsend Middle School; Norma Zuniga, bilingual/special education diagnostician; Glory Tacheenie-Campoy, special educator on educational leave; Debbie Fleischman and Susan Bakersipe, specialists in charge of the Tuscon Unified School District Special Education Computer Resource Training Center, located at Blenman School; Alpha Richards, Cragin Elementary School; Francisco Sainz, Blenman School.

The TUSD Special Education Computer Resource Training Center provides software/hardware preview and training services to special educators throughout Tucson. For more information, contact Susan Bakersipe and Debbie Fleischmann, TUSD Computer Resource Training Center, 1695 N. Country Club Rd., Tucson, AZ 85716; 602/798-2056.

CELEBRATION OF FAVORITE SOFTWARE!

All-Time Favorites

Where in the World is Carmen Sandiego? According to our readers, she's at the Print Shop making Decisions Decisions about whether to go to The Factory or the Oregon Trail where she hopes to encounter the Muppets On Stage who are busy trying to decide if AppleWorks with Logo...

There are some software programs that just won't quit. You can release a hundred hi-tech, hi-res, interactive, multimedia extravaganzas, and teachers will still want their *Reader Rabbit!*

As a tribute to the faithful friends who have seen our readers through the triumphs and frustrations of integrating computers into their curricula, we've compiled this list of software titles that come up, year after year:

AppleWorks
Bank Street Writer III
Crossword Magic
Decisions, Decisions
Logo
Print Shop
Reader Rabbit
The Factory
Oregon Trail
Microtype, The Wonderful World of PAWS
Muppet Learning Keys/Muppets On Stage
Those Amazing Reading Machines
Where In the World is Carmen Sandiego?

Rosario Howard (left) and Susan Bakersipe share software from the Special Education Computer Resource Training Center's collection.

Charts of this year's favorites—by grade level, subject, and skill—start on page 22.

Key/Glossary

All the funny abbreviations after the program descriptions on the following pages really do stand for something—specifically, the format options and computer types applicable to each package. Here's what they all mean:

BI=Backup included. This means that the price listed includes a backup disk in the package.

BA=Backup available. This means that a backup disk is available separately, usually for a small price.

C=Copyable disk. But carefully read the publisher's agreement before you copy. Some grant you permission to make only one legal copy. Others let you make more copies within a site.

LP=Lab packs available. This means that the publisher will sell you disks bundled, usually in groups of 5 or 10, often at a lower price than were you to buy 5 or 10 individual programs.

SL=Site License available. This means that the publisher is willing to give you license to either copy the program within your school or district, or buy additional copies of the program at a very reduced price. Either way, you pay an upfront fee.

N=Network version available. This means that the program will run on a network system for the computers listed. However, it may not run on the network your school uses (e.g., runs on Apple Corvus but not AppleTalk). You should call the publisher for details.

A=Apple IIe, IIc, IIGS and sometimes the Apple II+, but we're not guaranteeing it.

AM=Commodore Amiga

AT=Atari ST

C=Commodore 64/128

GS=Programs designed specifically for the Apple IIGS; may not run on other Apple II computers.

Mac=Macintosh

MS=MS-DOS computers, including IBM PC, PS/2, Tandy 1000 series, and compatibles

PCjr=IBM PCjr

TRS=TRS-80 Models III/4/Color

K - 2

LANGUAGE ARTS

Prereading

MUPPET LEARNING KEYS/MUPPETS ON STAGE (Sunburst). Those moptop Muppets use a colorful laptop keyboard and disk to introduce children to the computer, letters, and numbers. *(BI, LP) (N, Apple version only)* A, C, PCjr, $129.

STICKYBEAR ABC (Optimum Resource). Lively animation and graphics help young children learn the alphabet and something about using the computer too. *(BA, LP)* A, C, MS, $39.95.

FIRST LETTER FUN (MECC). Four different programs use color and animation to help children identify objects and then match initial consonants to their corresponding sound. *(BI, LP, N, SL)* A, $59.

READER RABBIT (The Learning Co.). Children improve letter and word recognition, memory skills, and vocabulary as they follow friendly Reader Rabbit through four challenging game sequences. *(BI, LP)* A, MS, $59.95.

Reading

READER RABBIT (The Learning Co.). Early reading skills such as pattern and letter recognition, beginning spelling, and vocabulary are covered in four hare-raising programs. IIGS version talks. *(BI, LP)* A, MS, $59.95.

STICKYBEAR READING (Optimum Resource). Word/picture sets and put-together sentence parts aid children in vocabulary building and reading comprehension. *(BA, LP)* A, C, MS, $39.95.

PAINT WITH WORDS (MECC). Sight word recognition leads to colorful results as words turn into pictures and children create "word paintings" in this early learning program. Optional speech components. *(BI, LP, N, SL)* A, $59.

WORD MUNCHERS (MECC). Munchers and Troggles are just part of the fun of this program that teaches target vowel sounds. *(BI, LP, N, SL)* A, $59.

Writing

KIDWRITER (Spinnaker). Children create their own storybook by selecting characters and objects, then using a word processor to write the text. *Kidwriter Gold* for the IIGS has more graphics. *(BA, LP)* A, $39.95; C, $26.95; GS, MS, $49.95.

MAGIC SLATE (Sunburst). The 20-column format makes it easy for young children to learn word processing. Also comes with 40- and 80-column disks. *Magic Slate II* has teacher and student planner boxes. *(BI, LP, N)* A, $129.

MUPPET SLATE (Sunburst). Rebus writing and creating storybooks are but two of the many creative possibilities with this picture-word processor that works with the *Muppet Learning Keys*. *(BI, LP, N)* A, $75.

WRITING TO READ (IBM Educational Systems). Develops writing and reading skills by teaching young children how to write anything they can say and read anything they can write. *(C, LP, N)* MS, PCjr, $657 base kit.

SOCIAL STUDIES

Social Studies & Social Studies Thinking Skills

STICKYBEAR TOWNBUILDER (Optimum Resource). Students get that pioneering spirit as they build towns from the ground up and in the process learn how to read a map, plan, and hypothesize. *(BA, LP)* A, C, $49.95.

EASY STREET (Mindplay). Students work their way through a town, matching pictures of items on their shopping lists with the items in different stores. *(BA, LP)* A, Mac, MS, $49.99.

GERTRUDE'S SECRETS/ GERTRUDE'S PUZZLES (The Learning Co.). Gertrude's good for just about any problem-solving skill! A built-in editor allows teachers to tailor the programs. *(BI, LP)* A, MS, $59.95.

TIMELINER (Tom Snyder Productions). Time lines will never be boring again as long as students have *TimeLiner* to create them. Lines up to 99 pages long can be printed. Sample historical time lines are included. *(BI, LP)* A, Mac, MS, $59.95

MATH

Early Arithmetic Skills

COUNTING CRITTERS (MECC). Students count animals on a safari, match numbers in a magic show, and supply a pet store with puppies as they learn how to work with numbers from 1 to 20. *(BI, LP, N, SL)* A, $59.

MATH BLASTER!/MATH BLASTER PLUS! (Davidson). An editor, record keeper, test maker, and arcade-style game, all in one! IIGS version talks. *(BA, LP) (N, Math Blaster Plus only)* A, AT, Mac, MS, $49.95; C (*Math Blaster* only), $29.95.

MATH RABBIT (The Learning Co.). Children have a hip-hop time learning basic math skills with their favorite rabbit. Special program-customizing options available. *(BI, LP)* A, MS, $59.95.

STICKYBEAR NUMBERS (Optimum Resource). Those tricky, sticky bears play with trucks, ducks, planes, and more to give children practice in numbers and counting. *(BA, LP)* A, C, MS, $39.95.

Geometry & Measurement

CLOCK WORKS (MECC). Once students work through the activities to master reading, converting, and setting analog and digital clocks, they can design their own clock. John Cameron Swazey, watch out! *(BI, LP, N, SL)* A, $59.

MEASURE WORKS (MECC). Measurement skills of all kinds—from comparing sizes to recognizing perimeter and area—are covered in this highly visual program that comes with special teacher options. *(BI, LP, N, SL)* A, $59.

LOGO (any version)/ **LOGOWRITER** (LCSI). Logo helps children explore geometric relationships. All major computers, prices vary. *LogoWriter* integrates programming with graphics and word processing. *(C, LP, N, SL)* A, C, MS, $169.

FISH SCALES (DLM). Six graphic-and-sound activities explore the *how* of measurement: How are things measured for height, length, and distance? How do you use measurement to compare size? *(BA, SL)* A, $32.95.

Math Problem Solving

PATTERNS (MECC). Are there patterns in outer space? There are in this way-out program, which uses visual and aural stimuli to help children recognize and extend linear patterns. *(BI, LP, N, SL)* A, $59.

GERTRUDE'S SECRETS/ GERTRUDE'S PUZZLES (The Learning Co.). The first program gives practice in classification, grouping, and sequencing; the second covers higher-level ordering and sorting skills. *(BI, LP)* A, MS, $59.95 each.

MOPTOWN PARADE (The Learning Co.). A lively procession of "Moppets" is on hand to help students recognize patterns and practice sequencing and comparison skills. *(BI, LP)* A, $59.95.

THE POND (Sunburst). There's only one way for the little green frog to make it to the other side of the pond: students must determine the pattern of lily pads to help the animated amphibian safely across. *(BI, LP, N)* A, C, MS, TRS, $65.

SCIENCE

Science & Science Thinking Skills

MYSTERY OBJECTS (MECC). It's no mystery why students love this program: Funny Feelers and Super Sniffers help them test and identify hidden objects by texture, size, smell, weight, shape, and color. *(BI, LP, N, SL)* A, $59.

ANIMAL KINGDOM (Unicorn). Teaches children about many different animal species, and helps with reading, spelling, and memory building as well! *(BI, LP, SL)* A, $44.95; AM, GS, Mac, $69.95; AT, $49.95; C, $39.95.

LEARN ABOUT ANIMALS/LEARN ABOUT PLANTS (Sunburst). Two beauties designed by Learningways that create interactive "micro-environments" in which children can explore the properties of animals and plants. *(BI, LP)* A, $65.

DINOSAURS (Advanced Ideas). Prehistoric predators travel through time to provide children practice in matching and sorting, counting, memorization. *(BA, LP) (N, MS-DOS only)* A, MS, $39.95; C, $34.95.

2 - 4

LANGUAGE ARTS

Reading

THOSE AMAZING READING MACHINES (MECC). Let students work these wacky machines to develop their powers of description and their ability to read for sequence and detail. Four programs available. *(BI, LP, N, SL)* A, $59.

M-SS-NG L-NKS (Sunburst). "Cloze" puzzles let students complete passages of literature from Madeline L'Engle to Edgar Allan Poe. Spanish and English editors. *(BI, LP, N)* A, C, MS, TRS, $65 each; *Spanish Editor* and *English Editor*, $75 each.

MICROZINE/MICROZINE JR. (Scholastic). Each "issue" offers interactive stories and a publishing application, among other curriculum-centered goodies. Five issues/year. *(BI, LP)* A, both programs; MS, Microzine only; $199 a year.

TOP READER'S CLUB (Micrograms Inc.). Children read stories written by a reading specialist and then test comprehension skills; management component summarizes progress. *(BA, LP) (N, Commodore version only)* A, C, $21.95 per disk.

Vocabulary

MECC SPELLING SERIES (MECC). Three programs, *Spellevator, Spelling Workout*, and *Spelling Press*, help hone students' spelling skills. Teachers can enter their own spelling lists. *(BI, N, SL)* A, $150 for all three, $59 each.

MAGIC SPELLS (The Learning Co.). If this program's magical kingdom doesn't cast a "spelling spell" over your students, nothing will. Editor options allow teachers to create their own lists. *(BI, LP)* A, MS, $59.95.

WORD MUNCHERS (MECC). Those hungry Munchers will stop at nothing to satisfy their appetites for words with target vowel sounds. Students help fatten them up by solving phonics puzzles. *(BI, LP, N, SL)* A, $59.

STICKYBEAR READING/STICKYBEAR SPELLGRABBER (Optimum Resource). What won't Stickybear do to help kids read and spell? *Spellgrabber* has editing option. *(BA, LP)* A, C, MS, *Reader*, $39.95; *Spellgrabber*, $49.95.

Writing

THE CHILDREN'S WRITING & PUBLISHING CENTER (The Learning Co.). Turn your classroom into a publishing house with this all-in-one desktop publishing program designed for little people. *(BI, LP)* A, $89.95; MS $99.95.

MAGIC SLATE (Sunburst). The magic here is that the 20-column disk is perfect for primary students, while the 40- and 80-column disks are just right for older kids. *Magic Slate II* includes quick margins and varied typestyles. *(BI, LP, N)* A, $129.

BANK STREET WRITER III (Scholastic). The granddaddy of educational word processors, this program includes pull down menus, spell checker and thesaurus, and a 20-column screen for younger children. *(C, LP, N, SL)* A, MS, PCjr, $89.95.

KIDWRITER (Spinnaker). Put an easy-to-use text processor and a library of clever graphics in the hands of a kid and you get a Kid Writer! *KidWriter Gold* is for the IIGS. *(BA, LP)* A, $39.95; C, $26.95; GS, MS, $49.95.

SOCIAL STUDIES

Social Studies & Social Studies Thinking Skills

WHERE IN... IS CARMEN SANDIEGO? (Broderbund). There's no one like Carmen in the *World*, the *USA*, *Europe*, or even *Time*. *(BI, LP)* A, AM, C, GS, Mac, MS; not all available for every computer; prices from $44.95 to $54.95.

THE OREGON TRAIL (MECC). Hunt buffalo? Raft down rivers? Shucks, that ain't nothin' for the folks heading for the frontier. Here's a case where problem solving is a matter of survival...out on the trail. *(BI, LP, N, SL)* A, $59.

JENNY'S JOURNEYS (MECC). Lake City is a wonderful place to visit, but would you want to live there? Students find out as they make their way through a new city using map reading skills. *(BI, LP, N, SL)* A, $59.

THE MARKET PLACE (MECC). Students set up business selling apples, lemonade, or tomato plants, making decisions about advertising, pricing, and inventory. Did Donald Trump start out this way? *(BI, LP, N, SL)* A, $59.

MATH

Computation

MATH BLASTER!/MATH BLASTER PLUS! (Davidson). What better way to supercharge addition, subtraction, multiplication, and division? *(BA, LP) (N, Math Blaster Plus only)* A, AT, Mac, MS, $49.95; C (*Math Blaster* only), $29.95.

MASTERING MATH SERIES (MECC). Nine-part series includes *Addition Logician, Circus Math, Quotient Quest*, and *Subtraction Puzzles*, each designed for practice in basic arithmetic skills. *(BI, N, SL)* A, $440 for the series, $59 each.

NUMBER MUNCHERS (MECC). These Munchers are pretty indiscriminate eaters, and they like numbers just as much as they like words. A Pac-Man style game gives students exciting practice in basic skills. *(BI, LP, N, SL)* A, $59.

MATH MAN (Scholastic). Here's a construction worker who needs students' best math skills to help him climb up a series of ladders. But beware! They're all working against the clock, so speed and accuracy are important. *(BI, LP)* A, MS, $29.95.

Fraction & Money Skills

MONEY WORKS (MECC). This program really works to help students understand basic money skills, including recognizing demoninations and counting and making change. *(BI, LP, N, SL)* A, $59.

FRACTION MUNCHERS (MECC). Another Muncher eating adventure, this time for fractions. Student search for various types of fractional numbers, equivalent fractions, and expressions using fractions. *(BI, LP, N, SL)* A, $59.

MONEY (Gamco). They say it makes the world go around, but in this case *Money* provides drills to help students understand money basics. Management system gives teacher control over a number of options. *(BA, LP, N)* A, C, MS, TRS, $44.95.

MONEY! MONEY! (Hartley). Progressively difficult levels of play help students grasp money concepts, from counting pennies to making change. *(BA, LP, N)* A, $39.95.

Geometry & Measurement

LOGO (All versions). Seems like there's no substitute for the real thing. Manipulating that turtle still gives kids the best experience in understanding spatial relationships. All major computers, prices vary among publishers.

MEASURE WORKS (MECC). This program gives students practice in estimating measurements, as well as calculating. Covers a variety of measuring skills, including area and perimeter. *(BI, LP, N, SL)* A, $59.

BUMBLE GAMES (The Learning Co.). Six appealing games introduce concepts of number lines, number pairs, and graph plotting. Students can plot their own designs. *(BI, LP)* A, $59.95.

LOGOWRITER (LCSI). Easy integration of Logo programming with text make this program a winner in helping student intuit geometric relationships. Primary, Intermediate, and Secondary versions available. *(C, LP, N, SL)* A, C, MS, $169.

SCIENCE

Science & Science Thinking Skills

MYSTERY OBJECTS (MECC). Curiosity and critical thinking skills get picqued as students try to identify hidden objects by their attributes. *(BI, LP, N, SL)* A, $59.

MINER'S CAVE (MECC). A clever introduction to simple and complex machines: students must decide which machine will best rescue treasure hidden in a miner's cave. *(BI, LP, N, SL)* A, $59.

ODELL LAKE (MECC). This classic program from MECC (are we seeing a pattern here?) allows students to role-play various species in a mountain lake to learn about animal interaction and food chains. *(BI, LP, N, SL)* A, $59.

HBJ SCIENCE SOFTWARE (HBJ). Interactive applications of science to real life situations. Four levels. A, C; copyable Apple disks, $690 per level; non-copyable Apple disks, $210 per level; non-copyable Commodore disks, $210 per level.

4 - 6

LANGUAGE ARTS

Reading & Literature

THOSE AMAZING READING MACHINES (MECC). Reading is anything but mechanical with these weird machines, which students match to written descriptions to develop detail reading ability. *(BI, LP, N, SL)* A, $59 each.

READ 'N ROLL (Davidson). Your students may "read around the clock" with this program's 300+ stories, developing skills regarding the main idea, inferences, determining relevant facts, sequencing, and vocabulary. *(BA, LP)* A, MS, $49.95.

MICROZINE (Scholastic). Four curriculum-based programs in every issue, including a reading Twistaplot and a classroom publishing unit. Five issues per year. *(BI, LP)* A, MS, $199 per year.

NEWBERY ADVENTURE SERIES (Sunburst). *Island of the Blue Dolphins, Mrs. Frisby and the Rats of NIMH, Charlotte's Web, A Wrinkle in Time* each contain the prizewinning book and a skill-testing disk. *(BI, LP)* A, $65 each.

Vocabulary, Spelling, & Grammar

SPELLICOPTER (Britannica Software). 400 words, 40 lists, multiple levels of play, and the ability to add both spelling words and context sentences make this one whirly-bird of a program. *(BA, LP)* A, MS, $39.95; C, $29.95.

GRAMMAR GREMLINS (Davidson). A haunted house is the scene for grammar rules practice. An editor lets teachers add extra practice sentences and pre- and post-tests. Extra data disks available separately. *(BA, LP)* A, MS, $49.95.

SPELLEVATOR (MECC). Going up? With this versatile, fun spelling program, students can't go any other direction. Custom teacher options available. *(BI, LP, N, SL)* A, $59.

WORD ATTACK! (Davidson). Four different learning activities cover 675 words grouped into nine difficulty levels. *Word Attack Plus!* has five activities, a testmaker, and flash card maker. *(BA, LP)* A, AT, Mac, MS, $49.95; C, $29.95.

Writing

THE CHILDREN'S WRITING & PUBLISHING CENTER (The Learning Co.). Grade school students now have their own comprehensive, easy-to-use desktop publishing program! *(BI, LP)* A, $89.95; MS, $99.95.

APPLEWORKS 3.0 (Claris). This classic word processing/database/spreadsheet combo now has a spell checker, a quick-tab system, and expanded control keys. The GS version is fast! *(C, LP, SL) (N, Apple IIe/c only)* A, $249; GS $299.

BANK STREET WRITER III (Scholastic). This simple-to-use, yet powerful word processor also comes with writing process activities and a teaching guide to help integrate word processing into the classroom. *(C, LP, N, SL)* A, MS, PCjr, $89.95.

MAGIC SLATE (Sunburst). A 20-, 40-, 80-column word processor that comes with a teacher's guide chock full of writing/word processing lessons. *Magic Slate II* also offers reproducible student handbooks. *(BI, LP, N)* A, $129.

SOCIAL STUDIES

Social Studies & Social Studies Thinking Skills

WHERE IN...IS CARMEN SANDIEGO? (Broderbund). Students stretch research skills in pursuit of the elusive thief. *(BI, LP)* A, AM, C, GS, Mac, MS; not all versions for every computer; prices vary from $44.95 to $54.95.

THE OREGON TRAIL (MECC). A computer simulation that takes students out west to use their wits to survive the wiles of the wilderness. *(BI, LP, N, SL)* A, MS $59.

TIMELINER (Tom Snyder Productions). The basic timeline program can be used in just about any subject area. Four different social studies data disks are also available separately at $19.95 each. *(BI, LP)* A, Mac, MS, $59.95.

DECISIONS, DECISIONS (Tom Snyder Productions). The hardest decision you'll have to make is which *Decisions, Decisions* package to buy. *(BI)* A, MS; *American History* series, $380; *Critical Issues* series, $280; individual programs, $119.95.

MATH

Computation

MATH BLASTER!/MATH BLASTER PLUS! (Davidson). Add an editor, testmaker, and record keeper to five fun activities that reinforce basic skills. *(BA, LP) (N, Math Blaster Plus only)* A, AT, Mac, MS, $49.95; C (*Math Blaster* only), $29.95.

CONQUERING MATH SERIES (MECC). Eleven programs (*Conquering Decimals, Decimal Concepts, Fraction Concepts Inc.*, and more!) cover everything from whole numbers to ratios. *(BI, LP, N, SL)* A, $570 for series, $59 each.

FRACTION MUNCHERS (MECC). The newest in the Muncher family, this program provides lively practice in understanding fractions. *(BI, LP, N, SL)* A, $59.

MATH SHOP (Scholastic). The proprietors of 10 very downtown shops need help with inventory, cash flow, special sales, and more. Students develop basic math, estimation, ratio, decimal, and fraction skills. *(C, LP, SL)* A, MS, $69.95.

Geometry & Measurement

LOGO (All versions). A programming primer that helps develop geometry, measurement, and critical thinking skills. All major computers, prices vary among publishers.

LOGOWRITER (LCSI). The next step after Logo is learning to integrate programming with text and graphics. Primary, Intermediate, and Secondary versions available. *(C, LP, N, SL)* A, C, MS, $169.

BAKE AND TASTE (MindPlay). Julia Child could even benefit from this clever program that uses baking practices to teach measurement skills. *(BA, LP)* A, MS, $49.95.

PUZZLE TANKS (Sunburst). These tanks filled with wacky liquids like Yerple Paint aren't such a puzzle once you put your mind to it. Challenges students' abiltity to estimate and measure. *(BI, LP, N)* A, C, MS, TRS, $65.

Word Problems & Conceptual Thinking Skills

THE FACTORY (Sunburst). One out of three schools has this program and it's easy to understand why: building a factory with three basic machines has become a classic problem-solving challenge. *(BI, LP, N)* A, C, MS, TRS, $65.

MATH BLASTER MYSTERY! (Davidson). Students play detective as they decipher word problems in the lastest addition to the Math Blaster family. *(BA, LP)* A, MS, $49.95.

TEASERS BY TOBBS (Sunburst). That fella Tobbs has kids problem solving all over a grid—projecting, estimating, even working backwards! Separate versions for whole numbers, integers, decimals. *(BI, LP, N)* A, C, MS, TRS, $65 each.

HOW THE WEST WAS ONE + THREE x FOUR (Sunburst). This program is as clever as its title: students join a race along the old west trail (disguised as a number line) and use math strategies to finish first. *(BI, LP)* A, MS, $65.

SCIENCE

Science & Science Thinking Skills

SCIENCE TOOLKIT PLUS (Broderbund). Four modules for hands-on study of temperature, motion, earthquakes, and physiology. *(BI)* A, all four modules; MS, Master Module/Module 1 only; $99.95 for Master, $49.95 for Modules 1-3.

ODELL LAKE (MECC). Take a field trip to Odell Lake to gain an understanding of the balance and interactivity of nature. *(BI, LP, N, SL)* A, $59.

THE VOYAGE OF THE MIMI (Sunburst). Study humpback whales off the Maine coast and Mayan ruins in Mexico through video, software, and print. *(BI, LP)* A, Voyage I, $1300; Voyage II, $1050. Components also sold separately.

MYSTERY MATTER (MECC). Students conduct tests on pH, density, reaction to water, freezing and boiling point, electrical conductivity, and magnetism to determine the identity of unknown matter. *(BI, LP, N, SL)* A, $59.

6 - 8

LANGUAGE ARTS **Reading & Literature**	**MICROZINE** (Scholastic). Students work through the various activities on disk to develop reading skills across the curriculum. Five issues a year. *(BI, LP)* A, MS, $199 year.	**SPEED READER II** (Davidson). A program designed to improve reading comprehension and increase reading speed through six sequential activities and 35 reading selections. *(BA, LP)* A, AT, C, Mac, MS, $49.95.	**BANK STREET WRITER III** (Scholastic). This easy-to-use word processor designed especially for education is a perfect tool for the whole language approach to reading and writing. *(C, LP, N, SL)* A, MS, PCjr, $89.95.	**ACCELERATED READER** (Readup). With this seven-disk program, students read a book from a core list, then test comprehension. Five supplemental disks covering new titles available at $50 each. *(BI)* A, C, $300.
Vocabulary, Spelling, & Grammar	**GRAMMAR EXAMINER** (Britannica Software). Start as a cub reporter and advance to editor-in-chief by correcting errors in punctuation, capitalization, subject-verb agreement, and more. *(BA, LP)* A, MS $39.95; C, $29.95.	**WORD ATTACK!** (Davidson). Four activities provide practice on word meaning. An arcade-style game is the last "reward" activity. Teachers can add words and buy additional data disks. *(BA, LP)* A, AT, Mac, MS, $49.95; C, $29.95.	**APPLEWORKS 3.0** (Claris). The new spell checker can verify one word in a document or all of them, then display a summary of words misspelled and corrections made. *(C, LP, SL) (N, Apple IIe/c only)* A, $249; GS $299.	**SPELLICOPTER** (Britannica Software). A variety of challenge levels, and the ability to customize the program make this program easy to integrate into any spelling lesson. *(BA, LP)* A, MS, $39.95; C, $29.95.
Writing	**APPLEWORKS 3.0** (Claris). This workhorse now has loads of teacher-written templates available through Claris and other sources. A souped-up IIGS version also available. *(C, LP, SL) (N, Apple IIe/c only)* A, $249; GS $299.	**BANK STREET WRITER III** (Scholastic). A writing tool for education should be flexible, and this one fits the bill with its "frozen writing" prompts that allow teachers to create individual, non-erasable lessons. *(C, LP, N, SL)* A, MS, PCjr, $89.95.	**THE CHILDREN'S WRITING & PUBLISHING CENTER** (The Learning Co.) Makes writing an adventure for students in grades 2 to 8, who can now easily create newspapers,storybooks, and more. *(BI, LP)* A, $89.95; MS, $99.95.	**FRED WRITER** (CUE Softswap). This blessed little gift from the public domain belies the saying, "You get what you pay for." Different packages contain different utilities and cost varies, but you can copy it free of guilt or charge. A, $20-$42.
SOCIAL STUDIES **Social Studies & Social Studies Thinking Skills**	**WHERE IN ...IS CARMEN SANDIEGO?** (Broderbund) She may be dastardly, but no one teaches geography better than Carmen. *(BI, LP)* A, AM, C, GS, Mac, MS; not all versions for all computers; $44.95 to $54.95.	**DECISIONS, DECISIONS** (Tom Snyder Productions). Tom Snyder won teachers' hearts with critical thinking software like this. *(BI)* A, MS; *American History* series, $380; *Critical Issues* series, $280; individual programs, $119.95.	**MICROZINE** (Scholastic). Imagine a computer disk "magazine" in your mailbox five times a year—chock full of activities you can use in your social studies, language arts, science, or math class. *(BI, LP)* A, MS, $199 per year.	**WORLD GEOGRAPH** (MECC). A "Living Map" that features an interactive combination of more than 40 on-screen maps and a 55-category database of 177 nations. Whew! *(BI, LP, N)* GS, $139.
MATH **Geometry & Measurement**	**GEOMETRIC SUPPOSER** (Sunburst). Students create shapes, conjecture about geometric relationships in *Triangles, Circles, Quadrilaterals*. (BI, LP) (N, *Triangles, Quads* only) A, all three; MS, *Triangles, Quads* only; $99 each.	**LOGO** (All versions). The space-time continuum... it all seems to make sense once you've worked with Logo. All major computers, prices vary among publishers.	**MATHEMATICS PROBLEM SOLVING COURSEWARE** (Tom Snyder Productions). This is a four volume treasure trove of math thinking skill stretchers for grades 5-8. *(BI, LP)* A, $69.95 each, $259.95 for the series.	**GEOMETRY** (Broderbund). One of the Sensei math programs available through Broderbund, this provides interactive animation to illustrate geometric concepts. Over 350 problems are included. *(BI)* GS, $89.95; Mac, $109.95.
Pre-Algebra	**ALGE-BLASTER!** (Davidson). Over 650 problems in five subject areas, including polynomials and factoring. Uses a tutorial approach. Extra data disks available. *(BA, LP)* A, MS, $49.95; C, $29.95.	**LOGO** (All versions). Leggo my Logo! Not only does it help teach geometry skills, but teachers use it to help promote algebra skills such as working with coordinates. All major computers, prices vary among publishers.	**GREEN GLOBS AND GRAPHING EQUATIONS** (Sunburst). You gotta zap those goofy globs by writing the right equation to draw the line (or parabola or arc) smack through their positions on a graph. *(BI, LP, N)* A, MS, $65.	**COORDINATE MATH** (MECC). Students work with a "snark" on a grid or use a graph or map coordinates to drive a car to Grandma's house or steer a rescue boat to rendezvous with a runaway ship. *(BI, LP, N, SL)* A, $59.
Math Problem-Solving Skills	**LOGO** (All versions). Guess you'd have to say this is about the best all-around program to teach math skills, including how to logically work out problems. All major computers, prices vary among publishers.	**THE FACTORY** (Sunburst). Hole puncher, stripe painter, rotater: Which of these machines was used to create a specific product? And in what order? Create a product yourself and stump someone else! *(BI, LP, N)* A, C, MS, TRS, $65.	**MATH SHOP** (Scholastic). If you think shopping is for valley girls, think again. This program takes you inside a store and then turns your brain inside out. Math never seemed so practical. *(C, LP, SL)* A, MS, $69.95.	**AI** (Scholastic). Students explore the thought process of a computer as they watch it develop decision-making capabilities. A Brain vs. Brain option simulates a meeting of minds. *(C, LP, SL) (N, Apple only)* A, Mac, MS, $69.95.
SCIENCE **Science & Science Thinking Skills**	**SCIENCE TOOKLIT PLUS** (Broderbund). A lab-in-a-box for exploring wind resistance, harmonic motion, and respiration. *(BI)* A, all four modules; MS, Master Module/Module 1 only; Master Module, $99.95, Modules 1-3, $49.95 each.	**ODELL LAKE** (MECC). It's been around forever, and why not? One of the original problem-solving programs from MECC, it still intrigues and stumps students. *(BI, LP, N, SL)* A, $59.	**GEOWORLD** (Tom Snyder Productions). It's a database! It's a simulation! It's *GeoWorld!* Students use geologists' tools and tests to search for 15 major mineral resources. Data easily transfers to *AppleWorks*. *(BI, LP)* A, $79.95.	**DISCOVERY LAB** (MECC). Students design and observe their own experiments as they try to determine the characteristics of imaginary organisms. *(BI, LP, N, SL)* A, $59.

(continued on page 28)

High School Freshman Conquers Quadratic Equations.

This and other amazing mathematical feats are brought to you by the IBM Mathematics Exploration Toolkit.

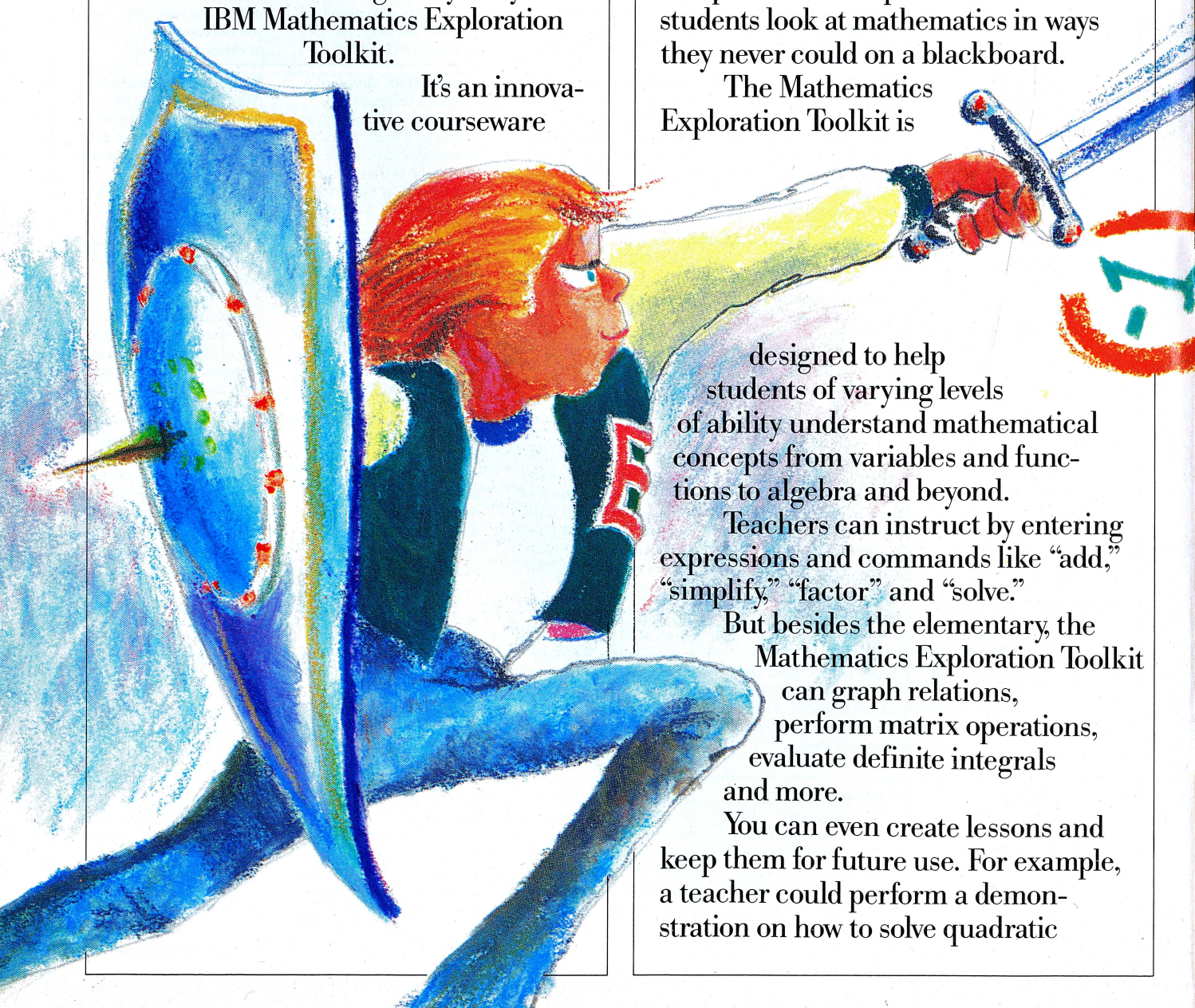
It's an innovative courseware program for the IBM PS/2 family of computers that helps teachers and students look at mathematics in ways they never could on a blackboard.

The Mathematics Exploration Toolkit is designed to help students of varying levels of ability understand mathematical concepts from variables and functions to algebra and beyond.

Teachers can instruct by entering expressions and commands like "add," "simplify," "factor" and "solve."

But besides the elementary, the Mathematics Exploration Toolkit can graph relations, perform matrix operations, evaluate definite integrals and more.

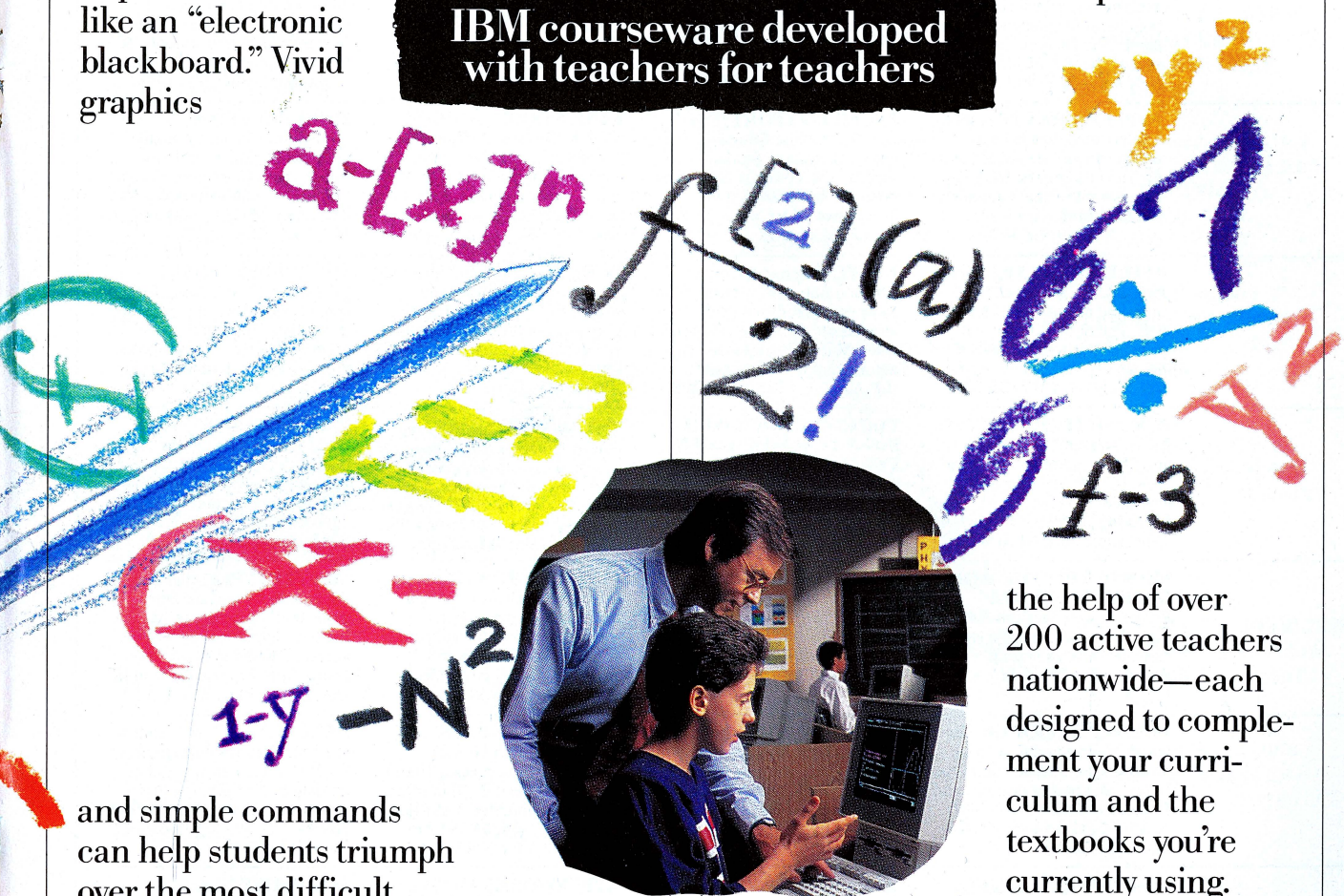
You can even create lessons and keep them for future use. For example, a teacher could perform a demonstration on how to solve quadratic



IBM courseware developed with teachers for teachers

equations, store it and then call upon it when needed.

Teachers can use the Mathematics Exploration Toolkit like an "electronic blackboard." Vivid graphics and simple commands can help students triumph over the most difficult algebraic problems and multivariate equations.



And a special feature makes it possible to create and graph multiple equations using various colors on the same screen at the same time.

What it all adds up to is a highly visual, involving way for students to explore the world of mathematics. And, perhaps just as important, an equally interesting way to teach it.

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Our courseware has been developed with the help of over 200 active teachers nationwide—each designed to complement your curriculum and the textbooks you're currently using.

After all, once the equations are conquered, there's still English, science and social studies to do battle with. For a free catalog and/or classroom poster (please specify grade level), or for further information, call 1 800 IBM-7257, ext. 152, or write:

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Tools

Word Processors

APPLEWORKS 3.0 (Claris). This integrated word processor/database/spreadsheet is as popular among teachers as students. The IIGS version is speedy. *(C, LP, SL) (N, Apple IIe/c only)* A, $249; GS $299.

BANK STREET WRITER III (Scholastic). This classic package now includes macros, a spell checker, a thesaraus, writing prompts, and a 20-, 40-, and 80-column display. *(C, LP, N, SL)* A, MS, PCjr, $89.95.

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APPLEWORKS 3.0 (Claris). With a 90,000-word dictionary, the spelling checker will verify one word or an entire document—and give a summary of errors. *(C, LP, SL) (N, Apple IIe/c only)* A, $249; GS $299.

PFS: WRITE (Scholastic). Added to this simple but powerful word processing program is a 60,000 word dictionary/ spelling checker. *(C, LP, SL)* A, MS, $79.95.

Telecommunications, Hypermedia, Multimedia

POINT TO POINT (Beagle Bros). Lets you send information over phone lines from one computer to another, with a program editor to change text before it is sent or after it is received. *(C, N, SL)* A, $99.95.

PROTERM (Checkmate Technology). Software designed to make telecommunications easier to handle. Supports over 16 different modems. Lets you log on to remote systems in one keystroke. *(C, SL)* A, $129.

HYPERSTUDIO (Roger Wagner Publishing). A *HyperCard* for the IIGS. Comes with amplified speaker, microphone, and sound digitizer, and works with Video Overlay Card. *(C, LP, N, SL)* 1 MB GS, $149.95.

SLIDE SHOP (Scholastic). Multimedia software that combines graphics, music, sound, and special effects into "slide" presentations. Works with the Apple II Video Overlay Card. *(C, LP, SL)* A, MS, $79.95.

Puzzlemakers & Testmakers

CROSSWORD MAGIC (Mindscape). Use this versatile program to create word puzzles in Spanish or geography or even math! *(BI)* A, AT, C, MS, $59.95; *(BA)* Mac, $49.95

PUZZLES AND POSTERS (MECC). Lets you design and print mazes, banners, posters, and crossword and word-search puzzles. Discontinued.

MULTIPLE CHOICES (Mindscape). Create a variety of games, puzzles, tests, and quiz formats including word searches, scrambles, acrostics, matching, true/false, and fill-in-the-blank. *(BI, LP)* A, $59.95.

APPLEWORKS 3.0 (Claris). Teachers have found 101 uses for this integrated wonder, including designing and printing out puzzles and tests. *(C, LP, SL) (N, Apple IIe/c only)* A, $249; GS $299.

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GRADE MANAGER (MECC). Keeps track of 50 grades for over 1000 students. Records scores, computes grades, and prints grade reports. *(BI, LP, N, SL)* A, MS, $59.

GRADE BUSTERS 1/2/3 (Grade Busters Corp.). A simple-to-use gradebook and attendence keeper, with easy data entry and editing. See 40 grades for 40 students at one-time. *(BI, LP)* A, $79.95.

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THE MAN IN

CURRICULUM CONNECTIONS

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Writing fact and fiction
Experimenting with forms of writing

SCIENCE
Learning facts about the moon
Writing with science facts

CRITICAL THINKING
Evaluating evidence
Distinguishing fact from fiction

THE MOON

Fact Or Fiction?

BY BETH WHITE

Is there a man in the moon? Might he be Neil Armstrong? This class project combines all kinds of "lunar learning" with lessons in critical thinking!

People have always been fascinated with the moon. This fascination has created a whole body of scientific knowledge—and a lot of "moon fancy" as well. Can your students tell the difference?

This project provides students with a variety of opportunities to improve and apply critical reading skills. Students will have an opportunity to differentiate between prepared fact and fiction stories in a word processing file, and then write some of their own stories for their classmates to try. For the rest of the unit, students will complete lunar activities which involve fact in the form of research, and fiction in the form of poetry, legends, and stories.

MATERIALS

For the main activities of this project, you will need a word processing program that you and your students are comfortable using. You can add a desktop publishing and a graphics/printing program as options throughout the project, particularly in the fourth step. You will also need data disks for your students to store their work. For Step One, you will need examples of factual newspaper articles and short fiction stories for your students to read. For Step Four, have on hand a selection of reference resources about the moon.

PREPARATION

Prepare for this project by using your word processor to type in the text file on pages 42-43. Save it as MOON on a disk for your students to access.

(continued on page 42)

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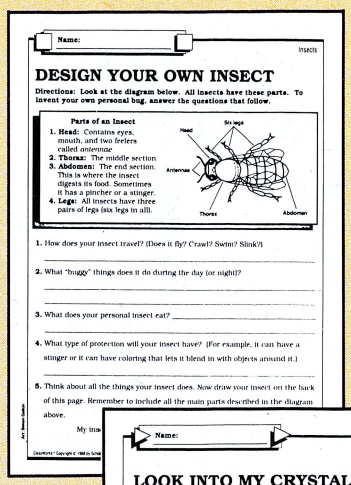

Name: Insects

DESIGN YOUR OWN INSECT

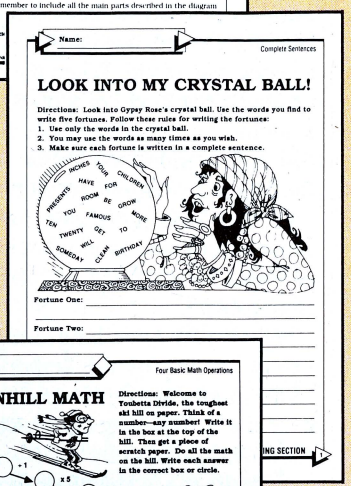
Directions: Look at the diagram below. All insects have these parts. To invent your own personal bug, answer the questions that follow.

Parts of an Insect

1. Head: Contains eyes, mouth, and two feelers called antennae
2. Thorax: The middle section
3. Abdomen: The end section. This is where the insect digests its food. Sometimes it has a pincher or a stinger.
4. Legs: All insects have three pairs of legs (six legs in all).

Head · Six legs · Antennae · Thorax · Abdomen

1. How does your insect travel? (Does it fly? Crawl? Swim? Slink?)
2. What "buggy" things does it do during the day (or night)?
3. What does your personal insect eat?
4. What type of protection will your insect have? (For example, it can have a stinger or it can have coloring that lets it blend in with objects around it.)
5. Think about all the things your insect does. Now draw your insect on the back of this page. Remember to include all the main parts described in the diagram above.


Name: Complete Sentences

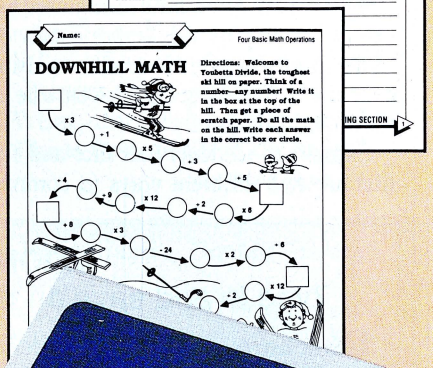
LOOK INTO MY CRYSTAL BALL!

Directions: Look into Gypsy Rose's crystal ball. Use the words you find to write five fortunes. Follow these rules for writing the fortunes:
1. Use only the words in the crystal ball.
2. You may use the words as many times as you wish.
3. Make sure each fortune is written in a complete sentence.

RICHES · YOUR · CHILDREN · HAVE · FOR · ROOM · BE · GROW · PRESENTS · MORE · YOU · FAMOUS · GET · TO · TEN · TWENTY · WILL · SOMEDAY · CLEAN · BIRTHDAY

Fortune One:

Fortune Two:


Name: Four Basic Math Operations

DOWNHILL MATH

Directions: Welcome to Torbetta Divide, the toughest ski hill on paper. Think of a number—any number! Write it in the box at the top of the hill. Then get a piece of scratch paper. Do all the math on the hill. Write each answer in the correct box or circle.

Name: Halloween

HALLOWEEN RHYMES

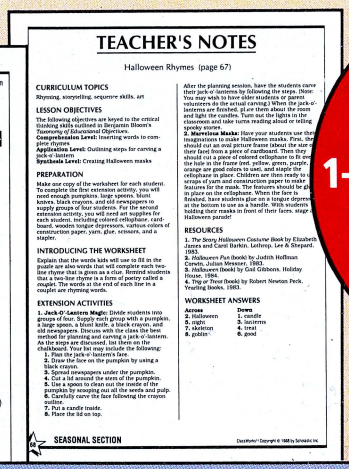
Directions: Read each Halloween rhyme. Think of a word to complete the rhyme and write it in the blanks. Then put the word in the puzzle.

ACROSS

1. Spooky creatures can be seen Visiting homes on ___ ___ ___ ___ ___ ___ ___ ___.
5. Costumed children make a scary sight As they trick-or-treat on Halloween ___ ___ ___ ___.
7. You can dress up just for fun As a ghost or ___ ___ ___ ___ ___ ___.
8. You might bump into a ___ ___ ___ ___ ___ ___ or two Who just might try to frighten you.

DOWN

2. Put a jack-o'-lantern in your window tonight With a flickering ___ ___ ___ ___ ___ ___ to give off light.
3. Jack-o'- ___ ___ ___ ___ ___ ___ ___ ___ glowing bright Make a wonderful Halloween sight.
4. As you say each "Trick-or- ___ ___ ___ ___." Fill your bags with goodies to eat.
6. If you are careful and act just right,


TEACHER'S NOTES

Halloween Rhymes (page 67)

CURRICULUM TOPICS

Rhyming, storytelling, sequence skills, art

LESSON OBJECTIVES

The following objectives are keyed to the critical thinking skills outlined in Benjamin Bloom's Taxonomy of Educational Objectives.
Comprehension Level: Inserting words to complete rhymes
Application Level: Outlining steps for carving a jack-o'-lantern
Synthesis Level: Creating Halloween masks

PREPARATION

Make one copy of the worksheet for each student. To complete the first extension activity, you will need enough pumpkins, large spoons, blunt knives, black crayons, and old newspapers to supply groups of four students. For the second extension activity, you will need art supplies for each student, including colored cellophane, cardboard, wooden tongue depressors, various colors of construction paper, yarn, glue, scissors, and a stapler.

INTRODUCING THE WORKSHEET

Explain that the words kids will use to fill in the puzzle are also words that will complete each two-line rhyme that is given as a clue. Remind students that a two-line rhyme is a form of poetry called a couplet. The words at the end of each line in a couplet are rhyming words.

EXTENSION ACTIVITIES

1. **Jack-O'-Lantern Magic:** Divide students into groups of four. Supply each group with a pumpkin, a large spoon, a blunt knife, and old newspaper. Discuss with the class the best method for planning and carving a jack-o'-lantern. As the steps are discussed, list them on the chalkboard. Your list may include the following:
1. Plan the jack-o'-lantern's face.
2. Draw the face on the pumpkin by using a black crayon.
3. Spread newspapers under the pumpkin.
4. Cut a lid around the stem of the pumpkin.
5. Use a spoon to clean out the inside of the pumpkin by scooping out all the seeds and pulp.
6. Carefully carve the face following the crayon outline.
7. Put a candle inside.
8. Place the lid on top.

After the planning session, have the students carve their jack-o'-lanterns by following the steps. (Note: You may wish to have older students or parent volunteers do the actual carving.) When the jack-o'-lanterns are finished, glow them about the room and light the candles. Turn out the lights in the classroom and take turns reading aloud or telling Halloween stories.

2. **Marvelous Masks:** Have your students use their imaginations to make Halloween masks. First, they should cut an oval picture frame (about the size of their face) from a piece of cardboard. Then they should cut a piece of colored cellophane to fit over the hole in the frame (red, yellow, green, purple, or orange cellophane works best). Tape the cellophane in place. Children are then ready to use scraps of yarn and construction paper to make features for the mask. The features should be glued in place on the cellophane. When the face is finished, have students glue on a tongue depressor at the bottom to use as a handle. With students holding their masks in front of their faces, stage a Halloween parade!

RESOURCES

1. *The Scary Halloween Costume Book* by Elizabeth James and Carol Barkin. Lothrop, Lee & Shepard, 1983.
2. *Halloween Fun* (book) by Judith Hoffman Corwin. Julian Messner, 1983.
3. *Halloween* (book) by Gail Gibbons. Holiday House, 1984.
4. *The Witch Next Door* by Robert Newton Peck. Knopf Books, 1983.

WORKSHEET ANSWERS

Across	Down
2. Halloween	1. candle
5. night	3. lanterns
7. skeleton	4. treat
8. goblin	6. good

SEASONAL SECTION

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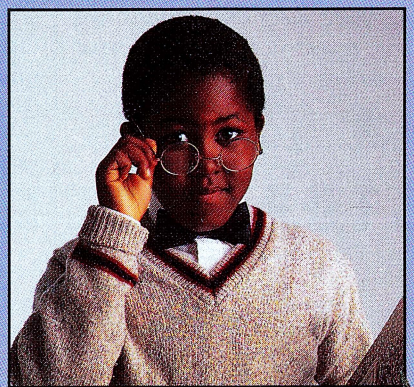
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THE MAN IN THE MOON—

STEP ONE
Distinguishing Fact From Fiction

Begin this lesson by passing out copies of your local newspaper and samples of short fiction stories for your students to read, or to follow along with as your read aloud. When they've heard or read both kinds of stories, ask your students to talk about how the stories differ. To guide their discussion, write the following definitions on the board:

•A *fact* is a statement that you can prove with some kind of evidence (for example, "The moon is 238,857 miles from earth").

•*Fiction* is something imagined, invented, or felt by the author (such as, "The moon is a kind spirit watching over me"). It cannot be proven true or false with evidence.

Explain to students that fact and fiction are two different ways to communicate ideas, just like bedroom slippers and snowboots are two different ways to keep your feet warm: neither one is "better" than the other, but each has its proper use.

Ask students to think about all of the ways a reader can tell whether a story is fact or fiction. The following "checklist" might help:

FACT OR FICTION?
CHECKLIST
Where (in what "source") did it appear?
Who said or wrote it?
Was evidence offered?
Can it be proven?
Is it about feelings, thoughts, or imaginary ideas?

You might also point out that the line between fact and fiction isn't always crystal clear. In fact, your students might want to keep in mind the following "Tricky Tips":

•Sometimes facts are included in pieces of fiction; that doesn't make the whole piece factual.

•In factual pieces, people sometimes offer their own opinions or explanations; these are not facts unless they can be proven.

STEP TWO
Working with the Text File

After you've introduced students to the distinction between fact and fiction, have them take a look at the MOON stories that you have saved on disk. Let each student have an opportunity to read through the stories and pick out which ones are fact and which ones are fiction, and indicate their key clues. Encourage your students to discuss how they distinguished fact from fiction.

STEP THREE
Writing Fact and Fiction

Once your students have practiced distinguishing fact from fiction, let

MOON Text Files
Type in and save on disk for students to access.

Directions to Students: Carefully read the four moon stories below. After you read each one, answer the questions and follow the instructions below it. When you have completed your work, save this file under your own name.

STORY #1

Source: A novel titled *Lunar Loony Tunes*, by Dizzy Dreamer

Prologue

I woke up at midnight with a funny feeling that I should look at the moon. I went to my boss's high-powered telescope and focused on a moon crater called the Sea of Tranquility. Suddenly, there was a shudder on the moon that caused everything to become a blur. I refocused the telescope—and it happened again! This time I focused so that I could view the entire moon at one time.

What I saw was incredible! I'd heard these stories about a man in the moon, but I never believed them until now. I actually saw the man in the moon blink! He blinked and one whole side of his face moved!

I went back to bed in a daze. The next morning I awoke with a start. Had it all been a dream?

Is this MOON FICTION or MOON FACT? *Delete the description that doesn't fit.*

***KEY CLUES**: Highlight all of the words or phrases in this story that helped you decide whether it was fact or fiction. Then use the copy function to copy the three most important clues here. Write a sentence explaining what each one means to you.*

1. *2.* *3.*

STORY #2

Source: *The Newtown Daily News*

The Moon's Surface

Astronomer I.M. Star spoke at the luncheon of the Musty Moose Club on Thursday. Her talk focused on what we now know about the surface of the moon. The following is taken from her speech:

The moon's surface has no water. You could not breathe on the surface of the moon without an oxygen tank. It is hot enough on the surface of the moon to fry an egg during the day, but colder than the North Pole at night.

The dark areas of the moon's surface are called *maria*, which is Latin for "seas," because the early scientists thought there might be water located in them. The lighter areas or highlands are called *terrae*, which is Latin for "land."

There are also *rills*, which are large, winding canyons in the smooth floor of the maria. Some rills are hundreds of miles long, several miles wide, and as deep as 1,000 feet.

The surface of the moon also has many craters caused by ancient volcanoes and by rocks crashing into the moon a long time ago.

Is this MOON FICTION or MOON FACT? *Delete the description that doesn't fit.*

***KEY CLUES**: Highlight all of the words or phrases in this story that helped you decide whether it was fact*

them write their own moon stories based on material from the text files. Have each student call up his or her saved version of the files and select several "key clues" with which to write a fact or fiction story. Students should feel free to add other factual or fictional material from reference resources as well. Students should then print out their completed stories and exchange them with classmates for a "fact or fiction" guessing session.

STEP FOUR

Lunar Activities

These activities, which integrate science, language arts, and social studies, will help to reinforce the differences between fact and fiction while extending students' study of the moon.

ACTIVITY 1: MOON DATA QUEST

Use your word processing program to create a "data sheet" of questions about the moon, like the ones below; save the file as MOONDATA. You might have your students seek the answers to these questions individually or in teams of three or four. Provide each student or team with a printout of the questions, and send them to the library to search out the answers. Each student or team should call up the MOONDATA file, type in the answers, and save it under a unique file name when completed.

MOON DATA QUEST
Name(s):

Find out all about the earth's only natural satellite by locating the answers to the following questions. You may use encyclopedias, science texts, and any science references that will help you.

1. Moon's distance from the earth
2. Moon's diameter, or distance across the center
3. How long does it take the moon to go around the earth one time?
4. How long does it take the moon to rotate on its axis?
5. How old is the moon?
6. What is the moon's gravity compared to the earth's gravity?
7. What is the daytime temperature on the moon?
8. What is the night temperature on the moon?
9. What is the moon's surface made of?
10. What is in the core of the moon?
11. What are the dark areas, or the lowlands, of the moon called?
12. What are the light areas, or the highlands, of the moon called?
13. What are the large winding canyons in the surface of the moon called?
14. What caused the craters on the moon?
15. What country was first to send a satellite to explore the moon?
16. Who was the first human to set foot on the moon?
17. What were this human's first words when he set foot on the moon?
18. Does the U.S. have any future plans for the moon?
19. What other interesting facts did you discover about the moon?
20. What other information might you like to find out about the moon?

(continued on page 44)

or fiction. Then use the copy function to copy the three most important clues here. Write a sentence explaining what each one means to you.

1. *2.* *3.*

STORY #3

Source: ***True History Comics***

A Moon Tale

Once upon a time there was a race between two giants to get to the moon. The giants were named Russia and America. Each giant wanted very much to win the race. Russia got a head start by sending a satellite crashing into the moon near the big crater Archimedes. America soon sent its own satellites crashing into the moon.

Then America got the upper hand by sending three astronauts into orbit around the moon. In another year and a half, America actually landed one of its ships on the moon. Inside the giant's ship were two humans, Neil Armstrong and Edwin Aldrin, who were the first to actually walk on the surface of the moon. The whole world was happy that they did this safely. They did experiments, gathered rock samples, and took photographs while on their trip.

The giant named America won that race to the moon. Both giants are still racing to explore space but, as the story goes, the giants now race together, sometimes as a team.

Is this MOON FICTION or MOON FACT? *Delete the description that doesn't fit.*

KEY CLUES*: Highlight all of the words or phrases in this story that helped you decide whether it was fact or fiction. Then use the copy function to copy the three most important clues here. Write a sentence explaining what each one means to you.*

1. *2.* *3.*

STORY #4

Source: ***Tall Tales Gazette***

Strange Doings by Moonlight

Famous astronomer I.M. Star is missing! She disappeared in the midst of completing some exciting new research about the moon, according to her lab assistant, Donald "Dizzy" Dreamer.

Before she vanished, Dreamer says, Star was gathering evidence that large portions of the moon are made of a hard, rather salty, green cheese.

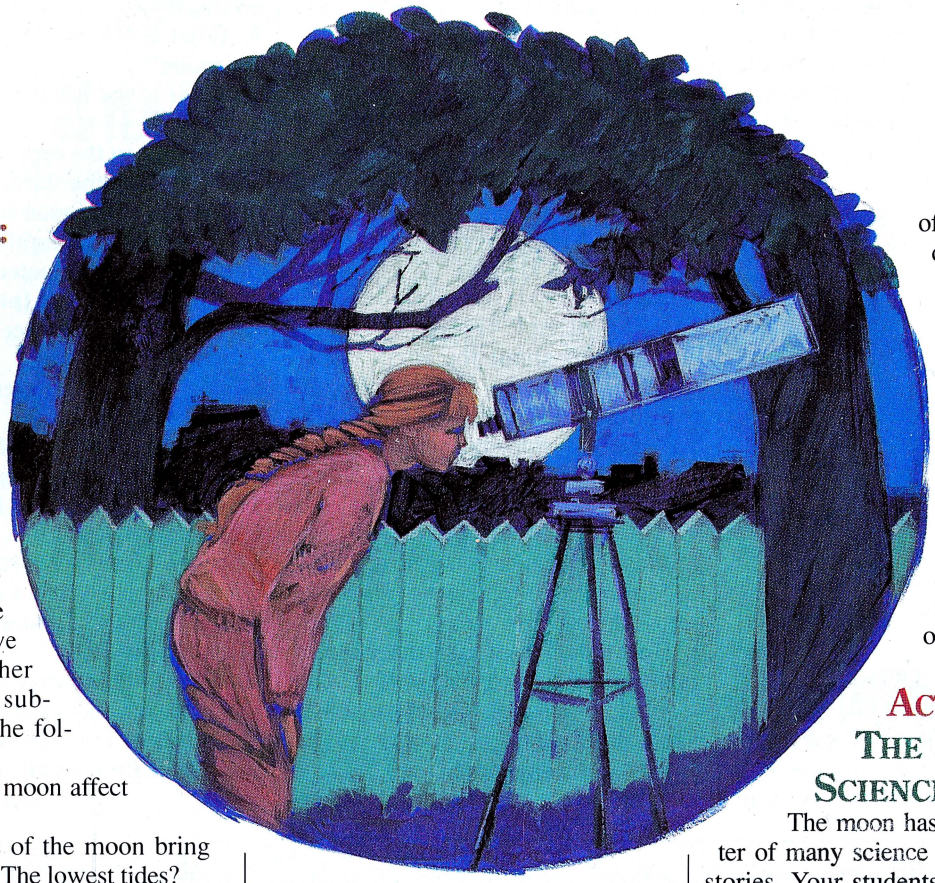
Dreamer also claims that Star had spotted a very ancient skeleton of a cow buried under a little dust on the surface of the moon. The cow may have died there when it made an unsuccessful attempt to jump over the moon, Dreamer says.

Just before announcing these discoveries, Dreamer says, Star was in her backyard viewing the full moon through her high-powered telescope when two werewolves carried her off. The police are now busy investigating this terrible event.

Is this MOON FICTION or MOON FACT? *Delete the description that doesn't fit.*

KEY CLUES*: Highlight all of the words or phrases in this story that helped you decide whether it was fact or fiction. Then use the COPY function to copy the three most important clues here. Write a sentence explaining what each one means to you.*

1. *2.* *3.*



Activity 2: The Moon and the Ocean

Take a little class time to discuss with students how the moon affects the tidal movement of the oceans. Then have students do further research on the subject, answering the following questions:

- How does the moon affect the tide?
- Which phases of the moon bring the highest tides? The lowest tides?
- Where in the U.S. are the highest tides found? Why?
- Where are the highest tides in the world found?
- What else can affect the tides besides the phases of the moon?

Have students summarize their findings in a word processing or desktop publishing report that they can then illustrate with hand-drawn or computer-generated graphics.

Activity 3: Factual Rhymes

Most students are familiar with this old nursery rhyme:

Hey, diddle diddle
The cat and the fiddle
The cow jumped over the moon,
The little dog laughed
To see such sport
And the dish ran away with the spoon.

Have students create their own nursery rhymes using facts from their research about the moon rather than the "moon fancy" preferred by Mother Goose. Remind students to keep the same rhythmic form while incorporating factual words and images. Students could use a desktop publishing or graphics/printing program to add illustrations and fancy type to their rhymes.

Activity 4: Lunar Poetry

The moon has been the topic of many different forms of poetry, from very romantic to downright silly. Read a few poems about the moon to your class; some good choices would be "The Moon's the North Wind's Cocky" or "Yet Gentle Will the Griffin Be," both by Vachel Lindsay, "The Moon's Funeral" by Hilaire Belloc, or "The Weaving" by Harold Cook. Then encourage students to experiment with moon-centered poetry writing on their own, with rhyme or without. Have students use your desktop publishing or graphics/printing program to add flourish to their poetic creations.

Activity 5: Moon Myths

Many civilizations, including the ancient Greeks and many American Indian tribes, viewed the moon as a very important part of their culture and way of life. Divide students into teams to research the importance of the moon in different cultures and religions. Ask the members of each team to work together to write their own lunar myths, folktales, or legends.

Activity 6: The Moon in Science Fiction

The moon has been at the center of many science fiction adventure stories. Your students might have fun writing their own science fiction stories that focus on exploring the moon, colonizing the moon, or using the moon as a stepping off point for exploring other planets. Have students use your word processing or desktop publishing program to create the final versions of their stories, which can then be bound together in a whole-class volume.

Beth White teaches sixth grade at the Fifth Street Middle School in Bangor, Maine.

(FOR SPECIAL NEEDS, SEE NEXT PAGE)

Resources:

All About the Moon, **by David Adler; Troll Assoc., 1983.**

The Moon, a Spaceflight Away, **by David Darling; Dillon, 1984.**

Race for the Moon, **by Robin Kerrod; Lerner, 1980.**

Calendar Moon, **by Natalia Belting; Holt, Rinehart & Winston, 1964.**

Full Moons: Indian Legends of the Seasons, **by Lillian Budd; Rand McNally, 1971.**

LORI LOHSTOETER

ADAPTING THIS PROJECT FOR SPECIAL NEEDS STUDENTS

BY NANCY BLEY

Learning disabled students can benefit greatly from educational computing—if it is tailored to their needs. Below you'll find key terms and strategies for adapting this class project for learning disabled students.

DEFINITION OF TERMS

Receptive language: Students with difficulties in this area have trouble understanding what they hear or read, particularly if the material includes words with multiple meanings.

Short-term memory: Memory problems make it difficult for children to retain information for long, even if they have understood it.

Abstract reasoning: Students with disability in this area find it hard to relate information and draw conclusions; they tend to be very concrete, have trouble with idioms, and often miss the overall point of the story.

Visual perception: This type of disability includes visual discrimination problems (a tendency to reverse letters and numbers) and visual figure ground problems (difficulty finding one's place on a page).

Auditory perception: Students with difficulty in this area find it hard to discriminate among sounds and to filter out background noise.

ADAPTIVE STRATEGIES

Resequence the steps: Students with receptive language and short-term memory problems may lack "stored-up" information about the moon, fact, and fiction. Try altering the sequence of this project and follow Step One with Step Four *before* going on to Steps Two and Three. Students will then have ready access to key types of information.

Preview vocabulary: Before launching this project, preview some of the vocabulary which is used to differentiate fact and fiction, such as *novel, newspaper, poetry, proof, source,* and *imagination.* Also, talk about the "tricky" inferences of words like *giant* or *research* in the story text files for Steps Two and Three.

Provide direct examples: Students with abstract reasoning problems do best with examples that are relevant to their own experiences. Help these students to begin differentiating between fact and fiction by starting with a fact that is related to them (such as, "You are in fifth grade"). Then ask them to provide, or select, some comments that might change this statement to fiction or opinion (such as, "All fifth graders want to be movie stars").

Model indirect proof: Abstract reasoning problems also make it hard for students to recognize proof that is beyond their direct experience. One way to bridge this gap is to have students state some factual information about a friend's experience or some other event which they know happened, but did not directly witness.

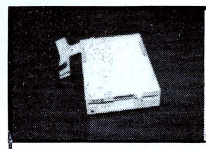
Practice distinguishing fact and fiction: One way to help students sort out intermingled fact and fiction is to divide your chalkboard into two columns, labeled "Factual Information" and "Fictional Information." Go over a newspaper article or short story with your students, and place each key piece of data in its proper category.

Point out clues: Students with receptive language or abstract reasoning deficits may have trouble pinpointing words that will help them distinguish fact from fiction in Steps Two and Three. Try previewing the material by selecting words or phrases from the text files and asking students whether these indicate fact or fiction.

Ease research tasks: Many resources contain small print and complex sentences which are difficult for students with visual perception or short-term memory problems. Provide these students with moon research resources which have been highlighted ahead of time.

Round up rhymes: Students with auditory perception problems may have trouble eliciting rhymes for their lunar poems. Have them develop a list of words that they might want to use in their poems, then help them highlight the parts to focus on for rhyming. Students can then make a list of all possible rhyming words to choose from as they write.

Nancy Bley is academic coordinator at the Park Century School in Los Angeles, Calif.



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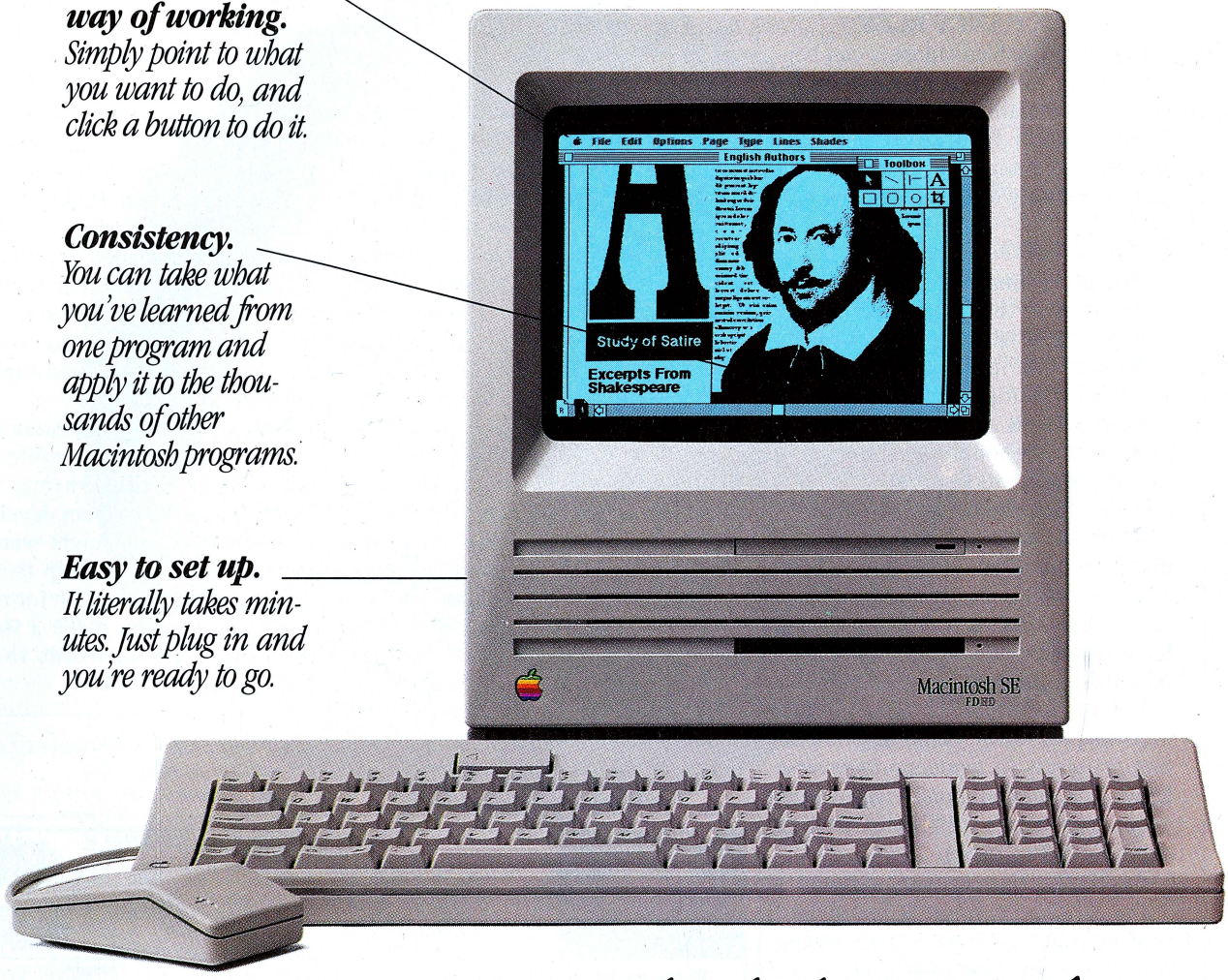

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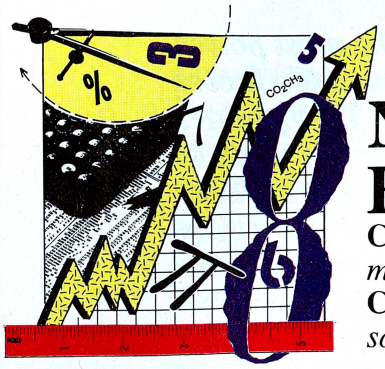


NEW YEAR'S RESOLUTIONS

Curriculum Objective: *Setting and measuring personal goals*
Computer Skill: *Using a word processor and spreadsheet software*

In 46 B.C. Julius Caesar proclaimed January 1 as New Year's Day. On that same day, Romans feeling the bulge in their stomachs from winter feasts made the first New Year's resolutions—no more pigging out, and sit-ups three times a day!

In Caesar's time, many people really did take part in end-of-the-year rituals that were meant to put away the past and prepare the way for the new year. These preparations began the tradition of making New Year's resolutions.

Use a word processor and a simple spreadsheet to encourage your students to make and keep their own measurable New Year's resolutions.

Materials Needed: You will need a word processor, spreadsheet software, and a printer. You may also want to make a sample spreadsheet on an overhead projector or chart paper.

Discussion: Talk with your students about New Year's resolutions. Explain that people make New Year's resolutions to improve themselves, to break bad habits, or start good ones.

Next, take time to explain how a spreadsheet works. On chart paper or an overhead projector, draw a diagram of a blank spreadsheet. Indicate its parts—row, cell, label, and column—and explain the function of each.

Activity: Ask your students to use the word processor to make a list of three New Year's resolutions. As part of their resolutions, they should make measurable goals for themselves—instead of "I will practice my oboe," for instance, they might write, "I will practice my oboe for eight hours a week." Students may also want to write a step by step explanation of how they will reach their measurable New Year's goals. Have students save their completed essays under their own names and print them out.

Activity: Using their essays as outlines, have your students design their own spreadsheets, complete with cells for their measurable goals and their daily, weekly, or monthly measures, plus formulas for calculating and comparing totals. (For instance, if a student wishes to keep track of the number of exercises he or she does in a month—measured as a percent of his or her New Year's goal—he or she could design a spreadsheet like the sample below.

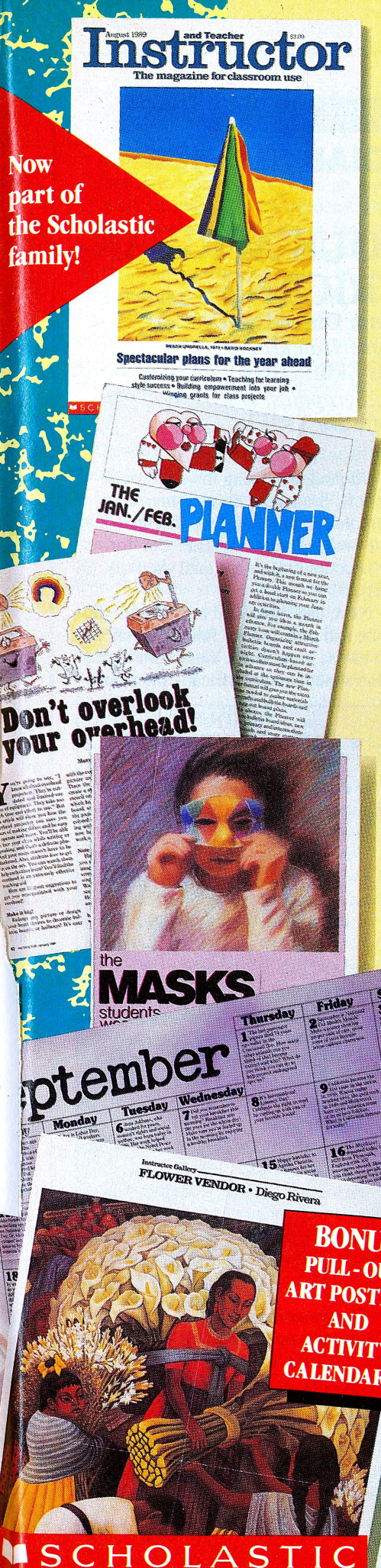
Determining the correct formulas to use for a goal-keeping spreadsheet is an excellent problem-solving challenge for students. Formulas can be as simple or complicated as students wish. In the sample spreadsheet, for example, the formulas in column I total each row's weekly entries. The formula in column K divides the total in column I by the goal in column J, then expresses the result as a percentage. Students will soon find that once they enter the right formula and begin compiling their daily, weekly, or monthly figures, the computer does the rest!

Activity: Have students print out and compare their spreadsheets. Encourage them to keep their spreadsheet entries current for one month, then check the results to see if their goals need to be revised!

Louise C. Orlando, New York, N.Y.
Debra Roach, Hudson Elementary School, Hudson, Iowa

(continued on page 50)

	A	B	C	D	E	F	G	H	I	J	K
1	MY EXERCISE PROGRAM										
2	WEEK: 1	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total	Goal	Percent
3											
4	SIT-UPS	100	100	100	120	125	140	140	825	800	103%
5	JUMPING JACKS	125	125	130	135	135	150	150	950	975	97%
6	LEG LIFTS	65	65	75	75	80	80	85	525	525	100%
7	PUSH-UPS	40	40	40	45	45	45	50	305	350	87%
8	ARM CIRCLES	100	100	110	110	125	130	130	805	875	92%



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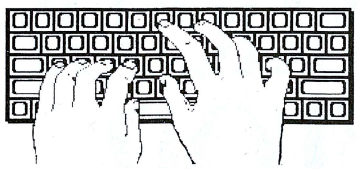

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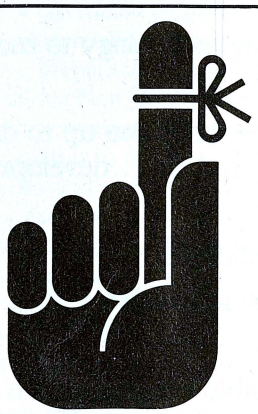

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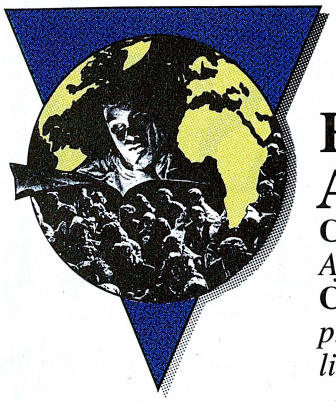

SOCIAL STUDIES

FAMOUS AFRICAN-AMERICANS

Curriculum Objective: *Exploring African-American history*
Computer Skill: *Using data base, word processing, graphics, and desktop publishing software*

As members of a multi-ethnic society, students should be aware of the contributions made by people of all backgrounds. That's one reason we celebrate African-American history month in February—and this lesson plan fits right in! Your students will work together in groups to gather information about prominent African-Americans, then organize and present that information using your classroom computer.

Materials Needed: The activities in this lesson involve word processing, data base, graphics, and desktop publishing programs; you can select activities based on your own classroom resources. You will also need construction paper, scissors, glue or tape, and a selection of research materials about famous African-Americans.

Preparation: Use your data base program to create a file that will be called FAMOUS AFRICAN-AMERICANS. It should contain the following fields, adapted to work with your particular software:

NAME:
BIRTHDATE:
DATE OF DEATH:
PLACE WHERE HE/SHE LIVED:
EDUCATION:
AREA OF ACHIEVEMENT:
WHY HE/SHE IS FAMOUS:
FAMILY HISTORY:
OTHER INTERESTING FACTS:

Be sure to leave enough space in each field for your students to enter the information that they will find.

(Note: If you do not have a data base program, or your class isn't comfortable using one, you can simulate a data file with your word processing program. Prepare a blank form on your word processor using the same fields as at left. Students can use this file as a template when entering research into the word processing file. For further instructions, see Optional Activity on page 51.)

Next, use your word processor to prepare and print out the following text file to use as a guide for classroom discussion about famous African-Americans:

FAMOUS AFRICAN-AMERICANS TEXT FILE

Science: Guion S. Bluford, Benjamin Banneker, George Washington Carver

Inventors: Andrew Jackson Beard, Lewis Howard Latimer, Jan Earnst Matzeliger

Literature: Alice Walker, Toni Morrison, Nikki Giovanni, Langston Hughes, Phillis Wheatley

Performing Arts: Louis Armstrong, Marion Anderson, Sidney Poitier, Michael Jackson

Civil Rights: Martin Luther King, Jr., Rosa Parks, A. Philip Randolph, Whitney Young

Politics: Ralph Bunche, Adam Clayton Powell, Thurgood Marshall, Barbara Jordan, Jesse Jackson

Athletics: Wilma Rudolph, Jackie Robinson, Arthur Ashe, Jr.

Business: George Johnson, John Johnson, C.J. Walker

Discussion: Talk to your class about the importance of understanding the contributions made to our society by people of all backgrounds. As a class, brainstorm a list of famous African-Americans. Next, pass out the list you previously prepared to help guide your class. Where might the names your class brainstormed fit into

this list? Can your students think of other names and other areas of achievement they would like to add?

Activity: Divide the class into small groups, and assign each group an area of achievement on which to focus. The groups should use your list of famous African-Americans—plus any additional names they can discover—so that each member of each group will have one person to research. As they complete their research, students should check each other's work within their groups and then enter their information into the data base file that you have prepared.

Optional Activity: If you'll be using a word processing file instead of a data base, call up the template file you have prepared. Have each student come to the computer, use the copy function to duplicate the blank template, and then fill in his or her information. The length of the file will continue to grow as you add more names. The file will work like a data base if your students use the search or find command to locate a particular person's name, for example, or search for the word "Scientist" and see all of the scientists who have been entered into the file.

Activity: Colleges and universities are often named after famous individuals. Have your students create their own directory of campuses by using some of the individuals from the FAMOUS AFRICAN-AMERICANS data base. Have each student search the file to select one person—other than the individual they have already researched—for whom he or she would like to name a college. The student should then use a graphics/printing program to create a number of pictures and headlines reflecting the contributions that the person has made. Students can then make a university logo or crest by printing out, cutting, and pasting a montage of these pictures onto a large shield which has been cut out of construction paper.

Create a bulletin board with the completed crests. Include the name of each university (such as the George Washington Carver College of Agriculture) and a one or two sentence description of its claim to fame ("A school where peanuts are used for more than just eating!"). Students will get caught up with school spirit as they develop clever slogans and logos.

Activity: Combining the graphics from the previous activity with a desktop publisher, your students can write short rebus-like stories. As the story of each famous African-American is told, the student can substitute a picture for words (for example, "George Washington Carver found many uses for the [picture of a peanut]"). Have students print a story about each person and then bind all of the stories together into a booklet. This anthology of African-American biographies will be a useful addition to your class library. You might want to give a copy to your school library, too.

Extension Activity: Use your data base as a schoolwide research tool. Make disk copies of your completed data file, and have your students create a worksheet for other classes that asks questions based on information in the data base (for example, "Which scientist found many uses for the peanut?"). Your students may want to turn the worksheet into a contest between classes, with the first class to accurately complete the worksheet winning a computer-generated certificate or banner in celebration of African-American History Month.

Terry Rosengart, P.S 26, Bronx, N.Y.

(continued on page 52)

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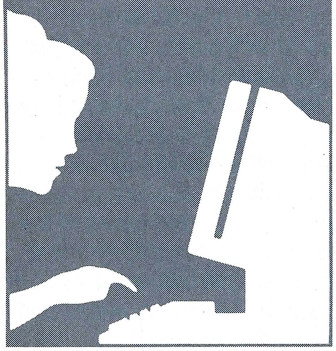

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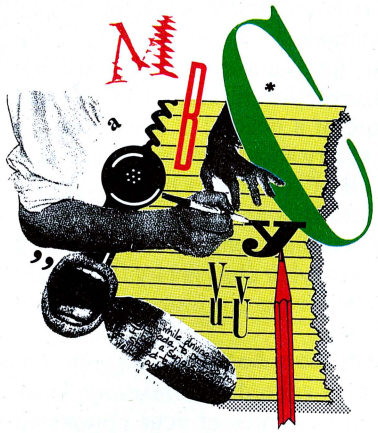


LANGUAGE ARTS

LOVE LETTERS

Curriculum Objective: *Using adjectives and nouns*
Computer Skill: *Editing with a word processor, using a graphics program*

Laugh away the winter blues with this lesson on adjectives and nouns that lets your students create crazy Valentine "love letters" for their friends.

Materials Needed: For this lesson, you will need a word processing program with an insert and delete function. For the Extension Activity, you will need graphics software for students to create personalized letterhead on which to print their final letters.

Preparation: Using your word processing program, type in the WORKSHEET text file, below; if you teach younger students, leave three blank spaces for students to fill in adjectives and nouns for each category; if you teach older students, leave five blank spaces under each category. Print out this worksheet and make a copy for each student. Next, type in one or both of the two sample "love letters," (one is for younger students and the other is for older students). Save the letters under the names VALENTINE1 and VALENTINE2 for your students to retrieve.

WORKSHEET TEXT FILE

NAME:

ADJECTIVES AND NOUNS

Directions: Look at the examples of adjectives and nouns below—then write in your own under each heading!

ADJECTIVES
Size (example: large)
1.
2.
3.
Color (example: purple)
1.
2.
3.
Condition (example: fluffy)
1.
2.
3.
Definitive or Limit (example: first)
1.
2.
3.

NOUNS
Common noun (example: boy)
1.
2.
3.
Proper noun (example: Paul)
1.
2.
3.
Plural noun (example: friends)
1.
2.
3.

LOVE LETTERS TEXT FILES

VALENTINE1 (for younger students)

Dear **1. adj** Valentine,

I am sending you **2. adj 3. adj 4. noun** for Valentine's Day. I love you with all my **5. noun**. Your **6. noun** are like the **7. adj** color of the ocean on a summer day! My gift of a Valentine's box of **8. adj** pieces of **9. noun** wrapped in **10. adj** paper is my way of saying "Hooray for you!"

Please say you will be my Valentine forever!

Truly yours,
11. noun

VALENTINE2 (for older students)

Dear **1. adj** Valentine,

From the very **2. adj.** time I sat next to you in my **3. adj 4. noun**, I knew I liked the **5. adj. 6. noun** of your **7. adj 8. noun**. Then I noticed the **9. adj** design shaved into your hair. A **10. adj 11. noun** design with a Cupid's arrow through it on each side of your head shows that you know the value of a **12. adj 13. noun** like Valentine's Day. Your **14. noun** reminds me of the **15. adj** of wheat on Mr. Yoder's farm.

Your **16. adj 17. noun** always has a **18. adj** glow about it. Your **19. adj. 20. adj** smile always makes other **21. noun** feel good. Mary, **22. noun**, and other kids in the class also admire your **23. adj 24. noun**.

This is the **25. adj 26. noun** I have ever written a letter to someone who I want for my own Valentine. The **27. adj** time I would love to write a **28. adj 29. noun** for you as my Valentine. Leave a note for me in my **30. adj** Valentine box with the **31. adj 32. noun** on it.

I like you and am waiting for your **33. noun**. Happy Valentine's Day to my very own **34. adj** Valentine.

Truly yours,
35. noun

Discussion: Explain to your students what adjectives and nouns are. An adjective is a word used to modify (describe or limit) a noun or pronoun. Nouns are words used to name a person, place, thing, or idea. The names of countries (such as Spain), buildings (White House), and people (Paul) are proper nouns. Proper nouns are always capitalized. Common nouns are words like house, cat, and boy; they are not capitalized.

Brainstorm with students a list of adjectives for size, color, condition, and limit, and a second list of common, proper, and plural nouns. Have students practice using these examples in sample

sentences—such as, "I love to give big, green roses to my squishy Taj Mahal!"

Tell students that they will be making up their own lists of adjectives and nouns to complete a silly Valentine Love Letter.

Activity: Hand out the Adjective and Noun worksheet. Ask each student to read the instructions and complete the worksheet. Depending on the reading level of your students, you may have them work together or individually on this activity.

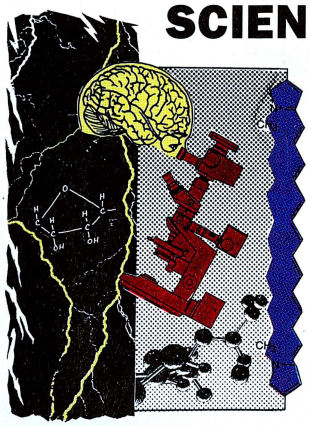
Activity: Boot up your word processor, and ask your students to retrieve whichever Valentine Love Letter text file is appropriate for them. Have students use the insert mode of your word processor to place their adjectives and nouns in the appropriate places in the letter, as indicated by the codes **adj** and **noun.** Advise students to use as many of their worksheet words as they can. Also, remind them that as they insert their words, they should delete the **adj** or **noun** code and number. When all of the spaces are filled, students should save their completed Valentine Love Letter under their own names, then go back and read their creations.

Extension Activity: Using a graphics program, have students create their own letterhead with funny, fictitious addresses, such as Box 23, Sweaty Palm Lane, Heartland, Wis. 00XX0. Students can print out their letterhead and then feed it into the printer (with your help!) to make a final printout of their Valentine letter.

Extension Activity: Students can adapt their funny Valentines to suit any holiday, using your word processor's find and replace feature. For example, students can instruct the word processor to find each occurrence of the word *Valentine's* or *Valentine* and replace it with *Groundhog's* or *Groundhog*. Have students print out and illustrate their revised loony letters.

Karen Dewalt
Twin Valley School District
Elverson, Pa.

SCIENCE



¿ANIMAL, VEGETAL, O MINERAL?

Curriculum Objective: *Classifying nature terms in two languages*
Computer Skill: *Using a data base and/or Logo software*

This science data base lesson lets your students classify and study nature terms in two languages! Students will learn how to classify objects in three broad science categories, then track down their foreign language equivalents. If you are teaching English as a second language, you can use this lesson to help reinforce basic English reading skills. *(Editor's Note: We assumed the first language for ESL students to be Spanish, but the activities are adaptable to any language.)*

Materials Needed: You will need a word processor, a data base management program with which your students are familiar, Spanish/English dictionaries, and chart paper. For the final, optional activity, you will need Logo software.

Preparation: Use your word processor to create a list of "animals, vegetables, and minerals." ("Vegetables" can be any kind of plant.) The list should include at least as many words as you have students in your class. If you are working with older kids, be sure to include plenty of unfamiliar words that will send students to the dictionary or encyclopedia. Jumble the list, print it out, and make copies for your class. On your own disk copy of the list, you may also want to make a list of the words' Spanish translations.

Next, use your data base program to set up a data file with the following fields: ENGLISH WORD, SPANISH WORD, ANIMAL, VEGETABLE, MINERAL.

Discussion: Begin this lesson by explaining to your students that one job of a scientist is to group similar things together under general names—to *classify* objects into *categories*. Next, introduce the three categories that students will be studying: animals, vegetables, and minerals. Explain what the categories are, in their broadest sense, and then give examples for each one.

Once your students are comfortable with these categories, give them your jumbled list of words. If you are teaching young children, you may want to work with them to create a list for each category by going around the room and asking students to name one animal, vegetable, and mineral; write their responses on the chart paper.

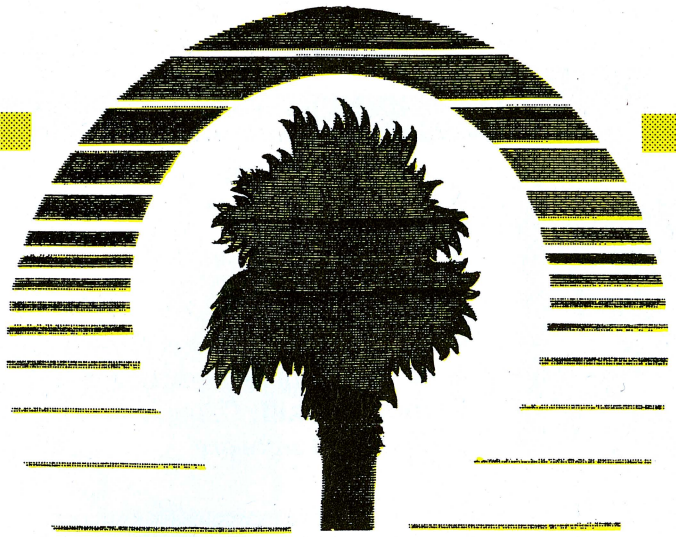
Finally, talk to your students about the advantages of organizing information with a data base. Explain that they will be setting up a data base to organize the English list of words into categories, and then translate them into Spanish.

Activity: Have each student choose one or more words on the list and then create a data record for it by typing in the word in the ENGLISH WORD field, leaving the SPANISH WORD field blank (or vice versa for ESL students) and typing an "X" in the appropriate catgeory field. Encourage students to research any words that they aren't sure of. When they are finished entering their data, have students save their records.

Activity: Next, assign each student to find the translation of his or her word. If your students are English speakers, they will be hunting for Spanish translations. If you are teaching an ESL class, the students will look for English translations. Students should type in the translation in the appropriate field on their data record, then save and print out their records.

Activity: Divide your students into pairs to play a game of Science Charades. One student in each pair acts out his or her word; the other student sorts and searches the data base to locate the word, then calls it out in English and Spanish.

Activity: Have each student search the data base for another word in his or her category, and learn the translation



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for that word. Older students may then want to add words to the data base.

Activity: Sort the data base by categories, and have students with words in each category work together to make a word and picture collage—in both languages—of their category.

Logo Activity: If your students are Logo programmers, they can test their knowledge of the science words in both languages while using Logo. Using the following procedures (developed for Terrapin Logo), create a Logo program that will let you or a student substitute an incorrect animal, vegetable, or mineral for a correct word in a data procedure.

The first step is to complete the DATA procedure so that it includes all the translations researched by the students. The procedure below only lists a few words in each language, but can be extended to include as many as desired. Stress the importance of typing the translations in the same order as the English list so that the correct translation will be made for each word. The DATA procedure is the only procedure which will need to be changed in order to add or delete words.

Finally, the students must run the program to check for the incorrect word and then correct it in the procedure. You can set up the program so students can look for a word that doesn't belong in the category, or a misspelled word.

The following is an animal example:

```
TO DATA
MAKE "ENGLISH [CAT DOG
DIAMOND CHICKEN FISH CLAM]
MAKE "SPANISH [GATO PERRO
DIAMANTINO POLLO PESCADO
ALMEJA]
END
```

After checking the DATA procedure to make sure all the translations are included and in the correct order, use these procedures to produce a listing of the file for each language.

```
TO SPANISH.WORDS :ENGLISH
:SPANISH
IF :ENGLISH = [] STOP
PR SE [ENGLISH:] FIRST
:ENGLISH
```

```
  PR SE [SPANISH:] FIRST :SPAN-
ISH
  PRINT []
  SPANISH.WORDS BF :ENGLISH
BF :SPANISH
  END

  TO SPANISH.FILE
  NODRAW
  DATA
  SPANISH.WORDS :ENGLISH
:SPANISH
  END
```

In order to create a master file that will translate each English word, simply follow the same format, including both languages.

```
  TO TRANSLATIONS :ENGLISH
:SPANISH
  IF :ENGLISH =[] STOP
  PR SE [ENGLISH:] FIRST
:ENGLISH
  PR SE [SPANISH:] FIRST :SPAN-
ISH
  PR []
  TRANSLATIONS BF :ENGLISH
BF :SPANISH
  END

  TO TRANSLATE.ALL
  NODRAW
  DATA
  TRANSLATIONS :ENGLISH
:SPANISH
  END
```

As your language data base grows, a printed copy will make review of the words much easier. The procedures for printing in Logo are very simple. Just use OUTDEV 1 to send information to the printer (if your printer interface is in slot 1). Type the name of the procedure you wish to run and then use OUTDEV 0 to send information to the screen.

```
  TO PRINT.SPANISH
  OUTDEV 1
  SPANISH.FILE
  OUTDEV 0
  END
```

Dee Miller
St. James Day School
Texarkana, Texas

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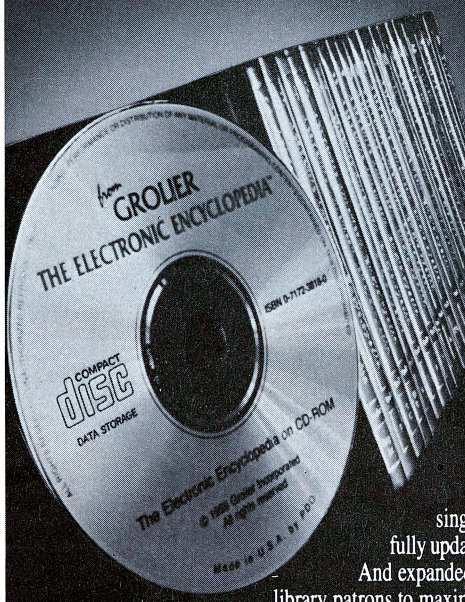

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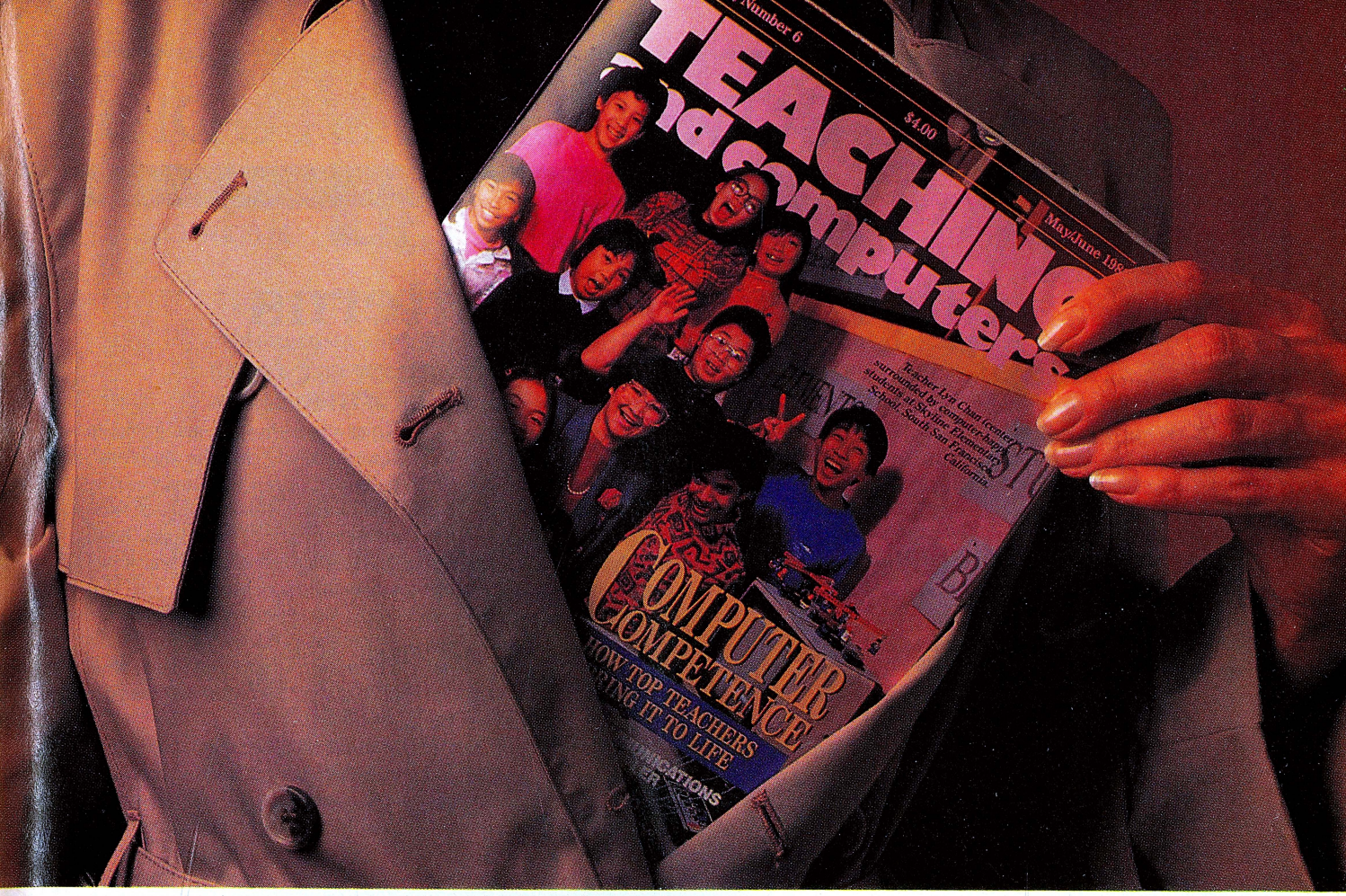

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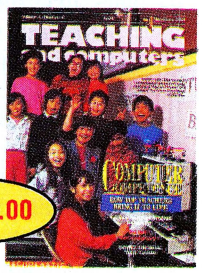

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BY THOMAS E. BOUDROT

Puttering with Patterns

Believe it or not, I still remember my fourth grade field trip. What I recall most vividly is not the state capitol building—the supposed highlight of the trip—but the skyscraper being constructed next to it. Why? Probably because of its massive pattern of steel and glass.

Patterns are everywhere. People are good at constructing patterns in buildings, fabric, art, and more. And when it comes to pattern design, nature is a master, from the crystalline patterns in snowflakes to the spiralling patterns in nautilus shells. The process by which patterns are formed—as well as their function and beauty—offers much that kids can learn from.

WHAT'S IN A PATTERN?

If you analyze several patterns, one point becomes clear: a pattern requires repetition. Bricks on a wall, cars in a parking lot, and ketchup bottles on a store shelf are all repeating patterns. A single unit—called a *motif*—repeats over and over again.

Patterns don't end with repetition, however. Color variation in a motif makes a pattern come alive. A block pattern in alternating red and black squares makes a checkerboard. An intricate pattern of crossing colored lines turns into a plaid pattern.

Although most people are quick to recognize patterns, few could explain how complex patterns are created. Why is an understanding of patterns so important to kids? There are two reasons. Analysis—the skill that allows us to mentally dismantle the "whole" and see its parts—can be encouraged by having children observe, compare, and create patterns. And to master a sense of aesthetics, children need help in developing an awareness of patterns in the things around them. This month's task cards encourage children to examine and create patterns using one or more motifs and a variety of colors—a fun-filled route to becoming analytical and appreciative observers!

MATERIALS NEEDED

You will need at least one computer and a printer with plenty of paper; graphics/printing software such as *Print Shop* (Broderbund), *SuperPrint* (Scholastic), *PrintMaster Plus* (Unison World) or any other program that creates 8-1/2" x 11" signs; blank formatted data disks for storing student work; graph paper; a wide assortment of crayons and coloring pens; scissors and tape or glue; and the four Picture Pattern Task Cards on pages 59 and 60. Teacher-made samples to accompany each card are helpful but not necessary.

PREPARATION

1. Study your classroom printing software to be sure it creates signs. It should also include a variety of graphics that can be "tiled" (printed in a grid-like manner).

2. Cut out and laminate the Task Cards on pages 59 and 60.

3. Model for your students how to use your printing software to create patterned signs. If you're using *Print Shop,* for example, you would follow these steps:

- Select the "Sign" option from the main menu. Then, choose the "Design Your Own" option.
- Select a border. (Be careful— thick borders will overlap graphics. If you're not sure about overlap, select "No Border.")
- Select a graphic. Also, choose the "Small" option (to get more items in your pattern) and the "Tiled" option (to make a 5 x 7 grid of graphics on the paper).
- Select "No Font" from the font menu unless you are making a letter pattern.
- Select "Print."

4. Create a few samples to go along with the Task Cards, if you choose.

5. If you have additional graphic disks that go along with your printing software, feel free to use them. If not—don't worry. Each activity will work with the standard disks supplied with the original printing program.

PRE-TASK CARD ACTIVITIES

- Tell the class the you are going to play a game called "sort the students." First, call on children who are wearing patterned clothing (plaid, dots, checks) and have them stand in a line. Then select another group of children wearing solid-color clothes. Lead the students to see the comparison: "How are the two groups different?" Conduct a brief discussion about patterns, then have students list 20 patterned items in the classroom.
- Distribute graph paper to the class. Have students draw a border around a section of paper that is five blocks wide and seven blocks high. Then give them the six-step pattern: "red-red-yellow-red-red-blue." Have students follow the pattern to color each box in the grid, starting at the top-left block of the grid section, completing the line, then dropping to the far left side of the next line (the same way we read). What other patterns can they create in 5 x 7 grids?

POST-TASK CARD ACTIVITIES

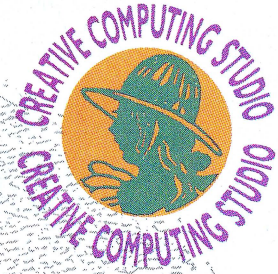
- A la Mandala: Check your school library for art books that illustrate mandalas (circular, geometric patterns). Share several with the class using an opaque projector. Analyze a simple one, noting patterns in color and shape. Then have students create their own mandalas by drawing four concentric circles and dividing them into eight pie-shaped wedges. Before kids begin coloring, discuss how to develop a color pattern that can be followed to finish the mandala.
- Nature's Patterns: Nature introduces another concept of pattern—symmetry. Collect pictures from the school's poster and slide collection to make a "Nature's Patterns" learning center. Have students explore five different objects in nature and describe, in writing and sketching, the patterns and symmetry they observed.

Thomas Boudrot is an independent educational consultant based in New York City.

PICTURE PATTERNS

TASK 1

DECO COLORS



Monartista's art studio needs a perk up. She says: "The gray of winter doesn't have to come indoors!" Mona (that's her nickname) wants *you* to create colorful wall patterns to chase away the indoor blahs. So, get out your crayons and markers, and head for the computer!

1. Load your printing program into the computer. Select the sign option from the menu.
2. Pick a border for your sign. You may choose "no border" if you don't want one on your sign.
3. Pick a picture for your pattern. Make sure it's a good one for coloring.
4. Pick the options that will make your picture small and "tiled" when it's printed. Then print your sign on paper.
5. Use your crayons or markers to make a colorful pattern. But wait! Before you start coloring, Mona has one rule about pattern-making: *Start at the top left corner of the paper. When the first row is done, go to the left side of the next row. Color your pattern the same way you read!*

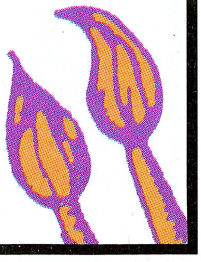
PICTURE PATTERNS

TASK 1

TWO-TONERS

Monartista says that making a great pattern is just like making soup: two ingredients are better than one! Mona wants you to try your hand at mixing two different color patterns on one piece of paper, still following her "start left" pattern-making rule. (Maybe next she'll let you make soup!)

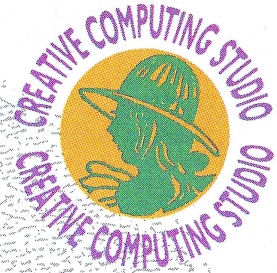
1. Load your printing program into the computer. Select the sign option from the menu.
2. Pick a border for your sign (or choose "no border").
3. Pick a picture for your pattern. Make sure it's good for using two different colors. For example, on a sailboat, you could color the sail one color and the boat another color.
4. Pick the options that will make your picture small and "tiled" when it's printed. Then print your sign on paper.
5. Use your crayons or markers to make the first color pattern. (If you picked a sail boat, you'd color the sails in a pattern first.)
6. Now, color in the second pattern (if you picked a sail boat, you'd color the boat pattern now).
7. Can your friends figure out each color pattern?



PICTURE PATTERNS

TASK 3

BREAK THE RULES!



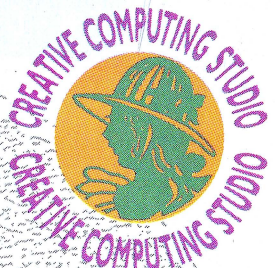
Monartista believes in rules—but she also believes that rules can be broken sometimes. Instead of starting your color pattern at the top-left corner of the paper, Mona says you can start at any corner you wish. Just remember: Break the rules—but keep the pattern!

1. Load your printing program into the computer. Select the sign option from the menu.
2. Pick a border for your sign (or choose "no border").
3. Pick a picture for your pattern.
4. Pick the options that will make your picture small and "tiled" when it's printed. Then print your sign on paper.
5. Pick a corner to start your pattern. Then decide how you'll make the pattern. Will you color up and down the rows or will you color from side to side? Use your crayons or markers to make the pattern.
6. Can your friends figure out how you made your pattern and where you started?

PICTURE PATTERNS

TASK 4

CRAZY QUILT



Do you ever have so many great ideas at the same time that you can't pick just one? There is a way to bring all of your pattern ideas together. Mona calls it "crazy quilting"!

1. Load your printing program into the computer. Select the sign option from the menu.
2. Pick one picture for your pattern. Choose the options that will make your picture small and "tiled" when it's printed. Then print your sign on paper.
3. Repeat Step 2—only this time, pick a different picture. Print your sign on paper.
4. Now, repeat Step 2 again—only this time, you can pick a medium-sized picture if you want. Make a design on the page with this picture, then print it out.
5. Cut your picture printouts into strips or squares. Tape or glue these onto another sheet of paper in any pattern you like (just make sure there is a pattern!). Then use your crayons or markers to color your pattern .
6. Make a pattern gallery with your friends. Whose pattern is the craziest?

BY EVELYN J. WOLDMAN AND EILEEN BARNETT

Look at Me! Look at You!

When one thinks of social studies in the kindergarten and early elementary years, the classic curriculum begins with the study of "me." Young children's universes revolve around themselves. They experience everything from the "I" perspective. Children must develop a concrete, full-featured concept of themselves before they can begin to delve into learning about their families, communities, nations—the world outside of themselves.

As children develop a sense of themselves, they also begin noticing differences among their peers—differences in everything from height and hair color to race, ethnicity, religion, and handicapping conditions. The primary grades are an ideal time to build an understanding of diversity into the social studies curriculum. With their teacher's guidance, children learn to celebrate both their commonalities and differences.

There are many different ways that classroom computers can enhance these aspects of the primary social studies curriculum. The lesson plan on page 62 and the resources listed on this page are excellent places to start.

MANAGEMENT TIPS

When young students begin exploring themselves and each other, there will logically be a high level of interaction among classmates. You can bring structure to this potential bedlam by dividing the class into pairs for various activities, including on-computer work. Encourage students to take turns and share resources fairly and equally within their pairs.

Computer-enhanced social studies learning that engages students kinesthetically and aurally as well as visually may work best in a learning center setup. For reading and worksheet activities, arrange chairs or pillows in a circle to one side of the classroom. Place the computer and selected software in one corner of the room, with two chairs

offering easy access to the keyboard; the printer should be stocked with plenty of paper. In another corner, away from the computer, set aside open floor space for art activities. Pairs of students can be directed to move through these learning centers in different sequences.

Be sure to spend some time demonstrating any software package you want your students to use. Some teachers find it helpful to train several student "software experts" to help their peers at the computer.

SOFTWARE RESOURCES

• Word Processing •

Muppet Slate (Sunburst). A word and picture processor for use with special Muppet Learning Keys children's keyboard. Apple.

Talking Textwriter (Scholastic). Uses synthesized speech to pronounce the words and letters children type. Apple, MS-DOS.

Dr. Peet's Talk/Writer (Hartley Courseware). A talking word processor that works with the Echo speech synthesizer. Apple.

Magic Slate II (Sunburst). Easy-to-learn word processor with a 20-column, large-type feature. Apple.

Kidwriter (Spinnaker). Create a picture from a variety of objects and then type a story about the illustration. Apple, MS-DOS, Commodore, Atari.

Cotton Tales (Mindplay). Easy word processor/desktop publisher for kids. Apple, MS-DOS, Macintosh.

• Graphics •

Color Me (Mindscape). Graphics program especially designed for young children. Requires KoalaPad, mouse, or joystick. Apple, MS-DOS.

Facemaker/Facemaker Golden Edition (Spinnaker). Students create and animate funny faces. Apple, Atari, Commodore, MS-DOS.

Mask Parade (Springboard). Kids can design and print out masks, costumes, accessories. Apple, MS-DOS.

The Print Shop (Broderbund). Classic graphics/printing program. Apple, Atari, MS-DOS, Macintosh.

SuperPrint (Scholastic). Graphics in all sizes and shapes. Apple, MS-DOS.

• Thinking Skills & Miscellaneous •

Stickybear Shapes (Optimum Resource). Animated cartoons and music rewards help teach children the relationships between shapes and sizes. Apple, Commodore, Atari.

Moptown Parade (The Learning Co.). Teaches pattern and color recognition, sequencing, and logic. Apple.

Teddy's Playground (Sunburst). Teddy helps kids distinguish among shapes, colors, and shading. Apple.

Body Awareness (Mindscape). Teaches children about parts of the body. Apple.

OTHER RESOURCES

"Primarily Me" (dittos) by Irene Hubbard & Lori Soderstrom; Good Apple.

"All About Me" and "About Me, Myself and I" (posters); Good Apple.

Someone Special, Just Like You, (photo book) by Fran Ortiz; Holt, Rinehart & Winston, 1984.

(SEE PAGE 62 FOR PRIMARY LESSON PLAN)

PRIMARY LESSON PLAN

With this computer-enhanced combination of discussion, reading, writing, and art, students explore their similarities and differences.

Materials Needed: For this lesson plan, you will need crayons; end roll of newsprint (usually available from your local newspaper office); scissors; safety mirrors; clothesline with clothespins (optional); one or more computers with printers; a selection of software from the Software Resource list on previous page, including a word processing program and a graphics program; dittos, posters, and books "about me" (see Other Resources, page 61).

Preparation: Use your word processor or graphics/printing program to create a worksheet asking the following questions in large type:

•What is something about me that is the same as all of the kids in my class?

•What is something about me that is the same as some kids, but not all kids?

•What is something about me that is different from all the kids in my class?

Print out and make one photocopy for each child in your class. Also, create three poster-sized sheets, each with one of the questions printed in large type across the top.

Discussion: Bring your class together into a large circle. Turn to the child on your right—let's call her Kathy—and hand her a safety mirror. Have her describe what she sees. Then ask Kathy how she and the child next to her are the same, and how they are different. Have the next child repeat the process, and so on around the circle. Then divide your class into pairs, and have each pair work together on the following activities.

Activity: Hand out your computer generated worksheet, and have each child fill in his or her answers to the questions. When their worksheets are completed, help students to share their responses with each other while recording them on the question posters.

Activity: Have the children work at the computer in pairs to use a word processing program to create experience stories about themselves as individuals. Students can then use your graphics programs to make illustrations for their stories. Have children color in their printouts and share them with their classmates.

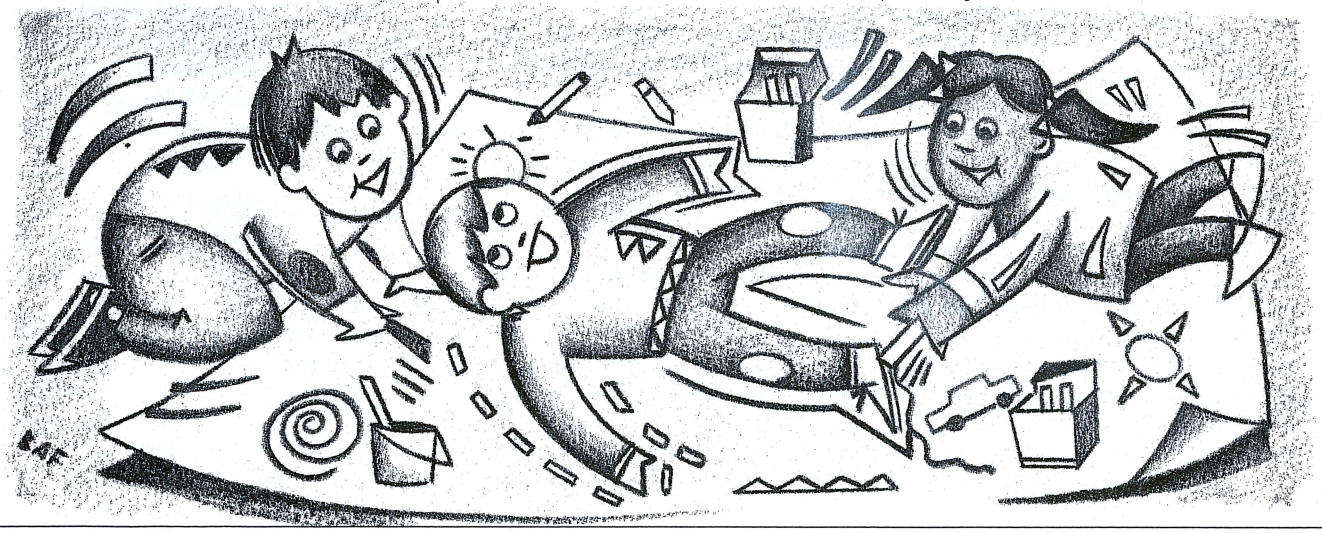
Activity: Students who have completed their word processing and computer graphics activities can be assigned to work in pairs at the computer on any of the thinking skills or body awareness software listed under Software Resources on page 61.

Activity: Have children create life-size paper dolls of themselves. Each child will have a turn to lie down lengthwise on the floor on top of the long newsprint; you or the student's partner will then carefully trace completely around the child. Once his or her image is sketched onto the paper, the child can begin to color it in; provide mirrors and encourage children to assist one another in identifying hair color, eye color, and so on. Upon completion, help each child to cut out his or her paper doll. A nice way to display these life-size paper dolls is to hang them from a clothesline across the room or along the corridor. Children will enjoy trying to guess who is who.

Activity: When children are not at work completing their worksheets, using the computer, or creating their paper dolls, they can be reading books and other materials in the reading/writing area.

Activity: Once all of the pairs have had a turn at all of the activities, bring the whole class together to talk about the things students have learned about themselves and each other.

Evelyn J. Woldman is software specialist for the Chapter 1 Computer Center in Framingham, Mass. **Eileen Barnett** is a former nursery school teacher currently with the Lesley College Computer Lab in Cambridge, Mass.



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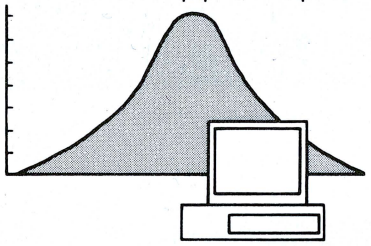

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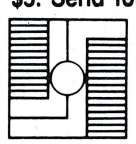

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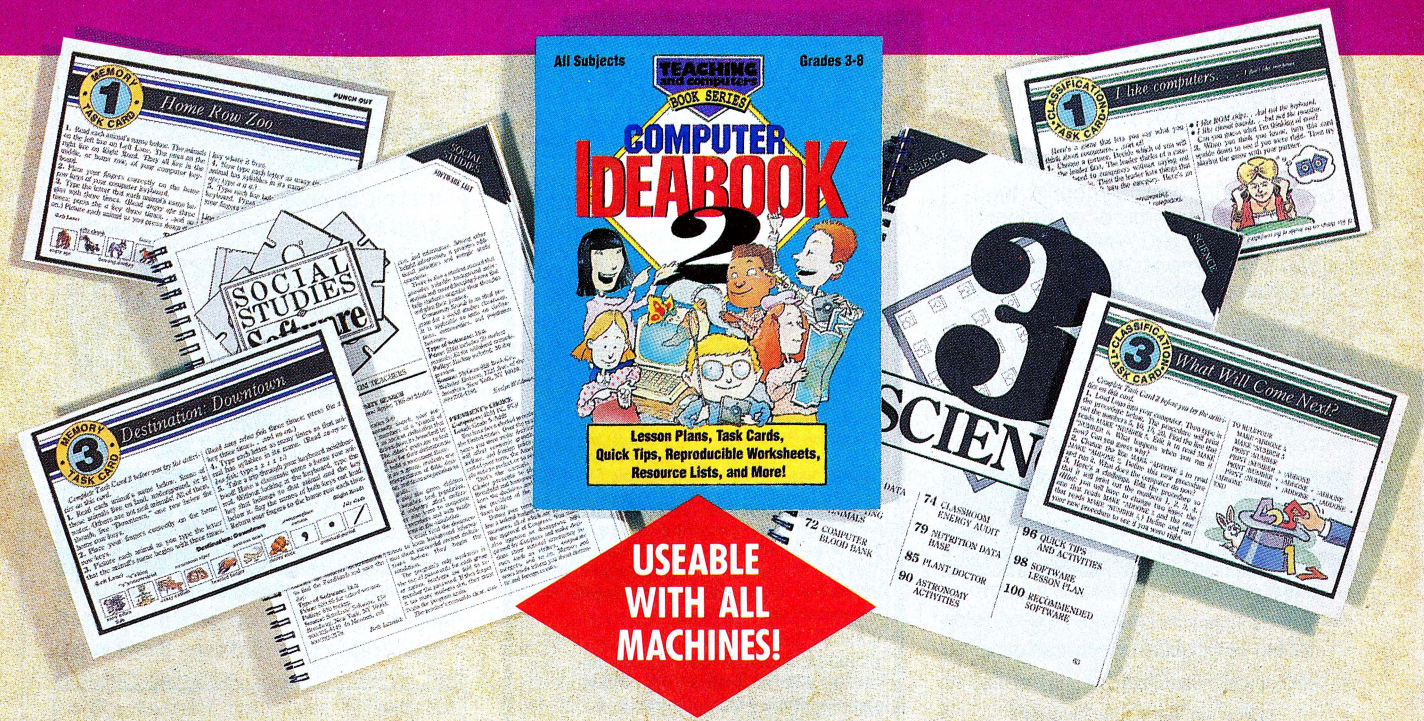

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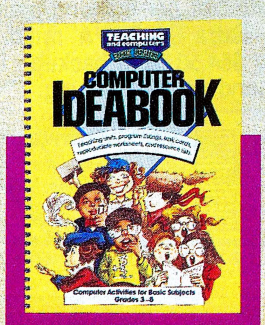

- Math–"Baseball Lunch"..."Budget Your Lunch"...spreadsheets...tables and graphs.
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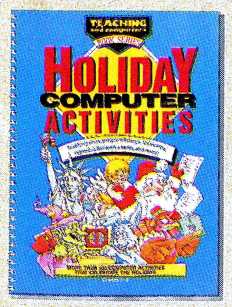

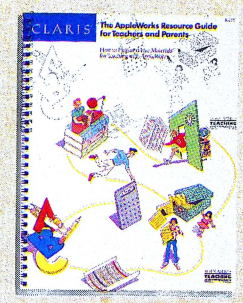

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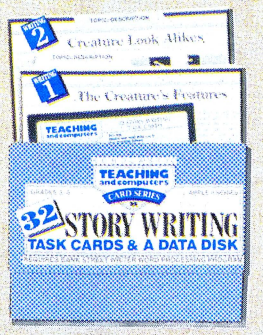

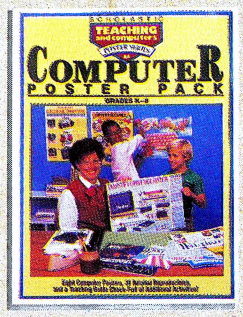

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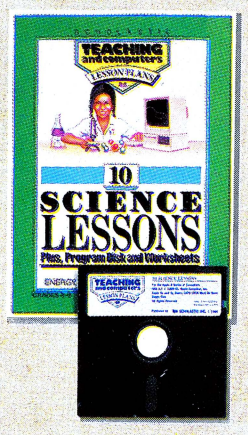

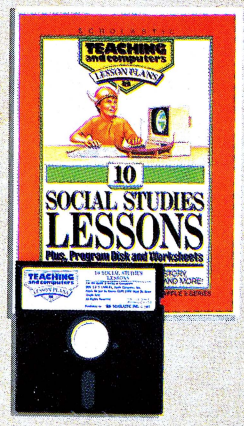

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